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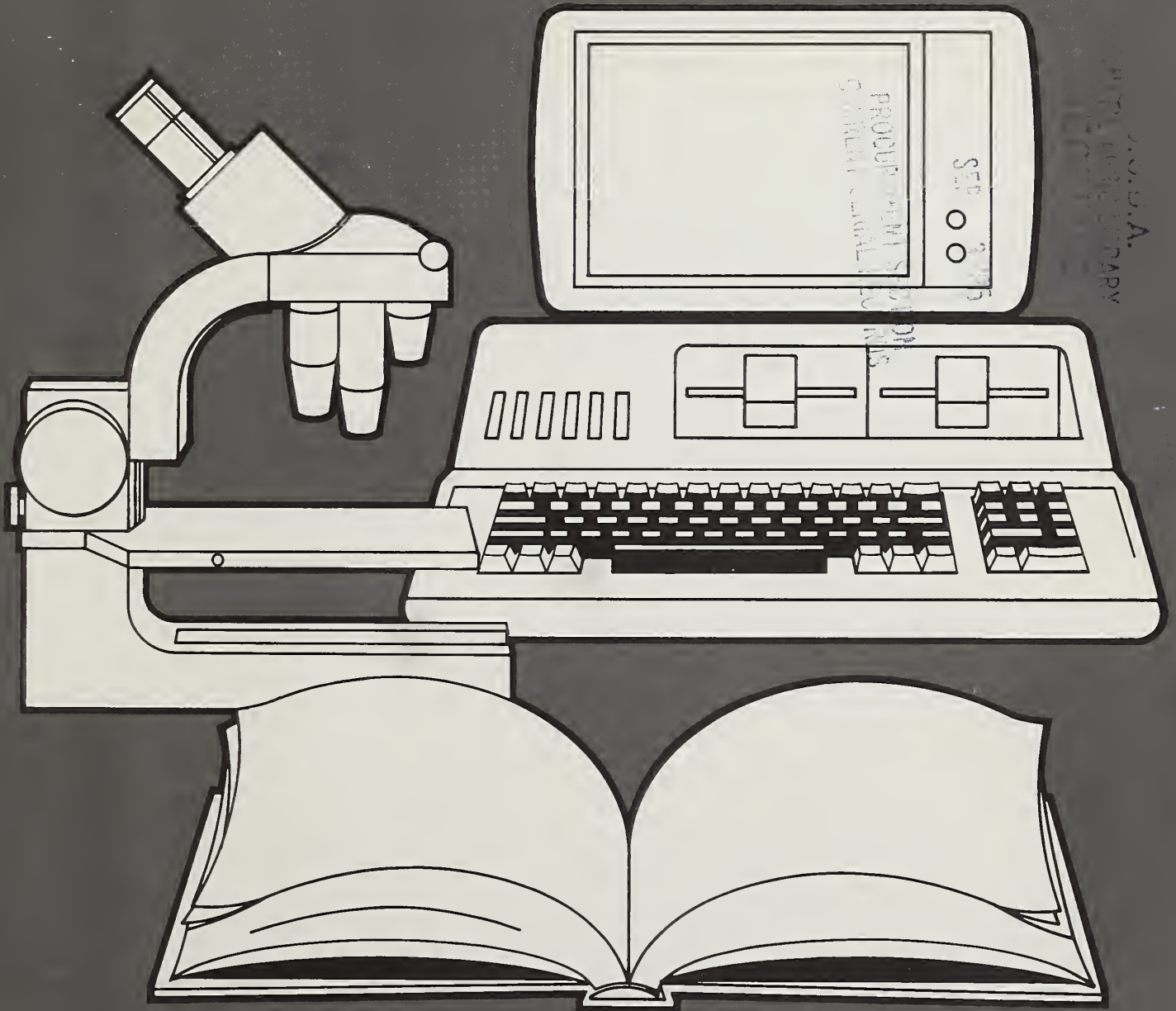
United States  
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Bibliographies  
and Literature  
of Agriculture  
Number 37

# The Protection of Cotton, January 1980-November 1984

## Citations from Agricola Concerning Diseases and Other Environmental Considerations



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# **The Protection of Cotton, January 1980-November 1984**

## **Citations from Agricola Concerning Diseases and Other Environmental Considerations**

Compiled by  
Charles N. Bebee  
National Agricultural Library

Bibliographies and Literature  
of Agriculture Number 37

United States Department of Agriculture  
National Agricultural Library  
Beltsville, Maryland 20705

and

United States Environmental Protection Agency  
Office of Pesticide Programs  
Washington, D.C. 20460

August 1985



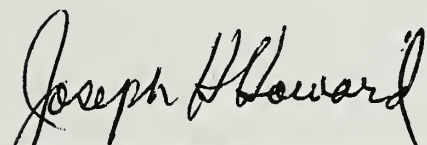
## FOREWORD

This is the third volume in a series of commodity-oriented environmental bibliographies resulting from a memorandum of understanding between the United States Department of Agriculture, National Agricultural Library (USDA-NAL), and the Environmental Protection Agency, Office of Pesticide Programs (EPA-OPP).

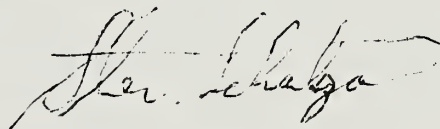
This close working relationship between the two agencies will produce a series of bibliographies which will be useful to EPA in the regulation of pesticides, as well as to any researcher in the field of plant or commodity protection. The broad scope of information contained in this series will benefit USDA, EPA, and the agricultural community as a whole.

The sources referenced in these bibliographies include the majority of the latest available information from United States publications involving commodity protection throughout the growing and processing stages for each agricultural commodity.

We welcome the opportunity to join this cooperative effort between USDA and EPA in support of the national agricultural community.



JOSEPH H. HOWARD, Director  
National Agricultural Library



STEVEN SCHATZOW, Director  
Office of Pesticide Programs







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- Requests may be submitted on the American Library or the International Library interlibrary request form, by TWX (710-828-0506) or via the OCLC interlibrary loan subsystem. Our OCLC symbol is **AGL**, and we request that the symbol be entered twice. The complete name of the person authorizing the request is to appear on each form.
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The following materials are **not** available for loan: serials (except for USDA serials), rare, reference and reserve books, microforms, and proceedings of conferences or symposiums. Photocopy or microform of the non-circulating publications will be supplied automatically as described below if the requesting organization indicates that this is acceptable on the loan request form.

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## INTRODUCTION

The citations in this bibliography are selected from works by U.S. authors on all aspects of the protection of cotton from diseases, insects, nematodes, chemicals, or other environmental conditions which affect the yield and quality of this commodity. All citations are derived from AGRICOLA (AGRICultural OnLine Access), the family of data bases compiled by the National Agricultural Library for its 1.8-million-volume collection.

This is the third bibliography included in a series jointly sponsored by the National Agricultural Library, United States Department of Agriculture (USDA-NAL), and the Office of Pesticides Programs, Environmental Protection Agency (EPA-OPP). Additional volumes issued recently or planned for the immediate future concern the protection of corn, soybeans, pome fruits, stone fruits, wheat, grain sorghum, rice, and peanuts.

Entries in the bibliography are subdivided into a series of subject headings used in the table of contents of the Bibliography of Agriculture and in the National Agricultural Library Catalog. Each citation appears under the subject heading assigned to the particular item. A complete author index is also included in the publication.

The Office of Pesticide Programs, EPA, has furnished technical assistance to the compiler through members of a commodity-oriented environmental data team which included:

Charles David Reese  
H. Irving Brigham  
Bernard Schneider, PhD.  
Richard Petrie

Any comments or questions may be forwarded to the compiler:

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Station : Southwestern Entomological Society.  
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# METEOROLOGY AND CLIMATOLOGY

0002

**Degree-days: an aid in crop and pest management (Cotton, *Heliothis zea*).**

Wilson, L.T.CAGRA. Barnett, W.W. Berkeley : The Station. California agriculture - California Agricultural Experiment Station. Jan/Feb 1983. v. 37 (1/2). p. 4-7. ill. (NAL Call No.: 100 C12CAG).

0003

**Effect of wind on the crop water stress index derived by infrared thermometry (*Sorghum bicolor*, *Zea mays*, *Phaseolus vulgaris*, *Gossypium hirsutum*).**

O'Toole, J.C.AGJOA. Hatfield, J.L. Madison : American Society of Agronomy. Agronomy journal. Sept/Oct 1983. v. 75 (5). p. 811-817. ill. Includes references. (NAL Call No.: 4 AM34P).

0004

**Temperature--its effect on cotton and cotton insects (Growth models, degree days, rainfall, 1930-1980, interactions, Oklahoma).**

Young, J.H. Willson, L.U.; Strabala, M.A. Stillwater : The Station. Research report P - Agricultural Experiment Station, Oklahoma State University. Apr 1983. Apr 1983. (P-831). 33 p. ill. Includes references. (NAL Call No.: 100 OK4M).



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0005

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Evolution of cotton insect management in the United States (History). Ridgway, R.L.XAAHA. Lloyd, E.P. Washington : The Department. Agriculture handbook - United States Department of Agriculture. Nov 1983. Nov 1983. (589). p. 3-27. ill. Includes references. (NAL Call No.: 1 AG84AH).

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0008

**Agricultural oral history interview with Stuart D. Lyda and Earl Burnett / with the direction of Irvin M. May.**

Lyda, Stuart D. (Stuart Davisson). Burnett, Earl.; Lewis, R. D.; May, Irvin M.; 1939. College Station, Tex. Texas A & M University Archives 1976. Interview conducted on June 24, 1976 by R.D. Lewis and Irvin M. May of the Texas Agricultural Experiment Station, on the subject cotton root rot investigations. 34 leaves ; 28 cm. (NAL Call No.: R SB608.C8L9).

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Carrol, S. SEA. Washington, D.C., The Administration. Extension review - United States Department of Agriculture, Science and Education Administration. Summer 1980. v. 51 (3). p. 28-29. ill. (NAL Call No.: 1 EX892EX).

0010

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Robbins, Louis Leroy, 1944. 1974. Thesis (M.S.)--Louisiana State University and Agricultural and Mechanical College, 1974. Extension Repository Collection ~Typescript (photocopy) ~Vita. ix, 71 leaves ; 29 cm. Bibliography: leaves 58-59. (NAL Call No.: SB951.5.R6).

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0012

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Jacobson, M. Washington, D.C. : The Office. United States patent - United States Patent Office. Oct 6, 1981. Copies of USDA patents are available for a fee from the Commissioner of Patents and Trademarks, U.S. Patents and Trademarks Office, Washington, D.C. 20231. Oct 6, 1981. (4,293,567). 3 p. Includes references. (NAL Call No.: ND CALL NO. (PAT)).

0013

**Arizona cotton farmers positive about new mandatory assessment (to increase funding for boll weevil research and abatement procedures, *Anthonomus grandis*, Senate Bill 1295, Arizona Cotton Growers Association).**

Phoenix, Ariz. : Elliott L. Cushman. Arizona farmer rancher. Aug 1984. v. 63 (8). p. 6, 30. 111. (NAL Call No.: 6 AR44).

0014

**The farm pesticide industry.**

Eichers, T.R. Washington, D.C., The Department. Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AG8A).

0015

**Beltwide boll weevil/cotton insect management programs: appendix B - economic evaluation.**  
United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.  
Extract: Alternative boll weevil/cotton insect management programs were evaluated for their effects on net market benefits and for their distributive impacts on producers and consumers. The Dptimum Pest Management with No Incentives and Boll Weevil Eradication (DPM-NI-BWE) program produced the highest net market benefits, as measured by the sum of producer and consumer benefits less public program costs. Consumer benefits from lower prices greatly exceeded the loss of producer incomes and public costs. The Dptimum Pest Management with No Incentive (DPM-NI) program produced the highest rate of return on Federal investment. A B/C ratio of 44:1 was obtained, compared with 17:1 for DPM-NI-BWE. ERS staff report - United States Dept. of Agriculture, Economic Research Service. June 5, 1981. Available from NTIS - order no. PB82-156-209. June 5, 1981. (AGESS810518). 68 p. maps. 20 ref. (NAL Call No.: 916762(AGE)).

0016

**Beltwide boll weevil/cotton insect management programs: appendix D - program definitions and public costs.**  
United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.  
Extract: Implementation plans were outlined and respective public costs were estimated for six beltwide boll weevil/cotton insect management programs in boll weevil-infested areas. Public cost is only one component of an economic evaluation of alternative programs. If fully implemented, annual public costs of the programs would be: current insect control (CIC), ~ .5 million; optimum pest management with incentives (DPM-I), \$36 million; DPM with phased incentives (DPM-PI), \$7 million; DPM with no incentives (DPM-NI) \$7 million; DPM-NI with boll weevil eradication (DPM-NI-BWE), \$7.5 million; and CIC-BWE, \$3 million. However, estimated public and private costs would total \$460 million during the 9 years to eradicate the boll weevil. Also, public costs for diapause treatments for the DPM program with phased incentives would total about \$61 million during the 3 years of implementation. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1981. Available from NTIS. May 1981. (AGESS810504). 190 p. (NAL Call No.: 916762(AGE)).

0017

**Beltwide boll weevil/cotton insect management programs: appendix E - the Delphi: insecticide use and lint yields.**  
United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service. The

Delphi, a method for systematic collection of information from experts, was modified to obtain biological data required for the economic analysis of boll weevil/cotton insect management programs. Cotton insect management and crop production experts provided detailed data regarding the insecticide use patterns and cotton lint yields they projected would result under each of five alternative insect management options, in 35 subregions of cotton production. These data were used to estimate average insecticide use and cotton lint yield of six boll weevil/cotton insect management programs. Producers' average insect control costs under each program also were calculated from the information provided by the Delphi experts. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1981. Available from NTIS. May 1981. (AGESS810507). 123 p. (NAL Call No.: 916762(AGE)).

0018

**Beltwide boll weevil/cotton insect management programs: overall evaluation.**  
United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.  
Extract: Two boll weevil/cotton insect management trials, conducted during 1978-80, demonstrated the technical and operational feasibility of eradicating a boll weevil population from a geographic area or eliminating the need for boll weevil treatments during the cotton-growing season. Six cotton insect management programs were specified and evaluated for application in the boll weevil infested areas of the Cotton Belt. The Dptimum Pest Management with No Incentive and Boll Weevil Eradication (DPM-NI-BWE) Program would yield substantially higher total economic and environmental benefits than the other programs. The DPM with No Incentive Program was estimated to yield the highest benefit/cost ratio in terms of public expenditures. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 15, 1981. Available from NTIS. May 15, 1981. (AGESS810721). 45 p. 16 ref. (NAL Call No.: 916762(AGE)).

0019

**Controlling Heliothis spp. on cotton through the release of Trichogramma pretiosum and applications of Bacillus thuringiensis - an economic assessment (integrated pest management).**  
Liapis, P.S. Washington, D.C., The Service.  
Extract: This study examines the cost effectiveness of employing biological controls to control Heliothis spp. on cotton in the Delta Area of Mississippi. The biological controls examined are: a) the release of Trichogramma, an egg parasitoid, b) the use of Bacillus thuringiensis, a bacterial agent, and c) the joint use of Bacillus thuringiensis and Trichogramma. The cost of employing the biological agents are compared to the cost of employing conventional material, and break-even

yields are determined. Partial budget analysis indicates that the cost of utilizing *Trichogramma* or *Bacillus thuringiensis* as the control agent may be cost competitive. Further research is needed to determine the yield effects of the biological controls examined in this study before use recommendations can be made. ESCS staff report - U.S. Dept. of Agriculture, Economics, Statistics, and Cooperatives Service. Aug 1980. Aug 1980. 36 p. 27 ref. (NAL Call No.: 916762(AGE)).

0020

**Economic analysis of cotton integrated pest management strategies.**

Liapis, P.S. Moffitt, L.J. Lexington, Ky., Southern Agricultural Economics Assoc. Extract: Cotton integrated pest management strategies are evaluated and compared under risk according to the exponential utility, moment-generating function approach to stochastic efficiency. Results suggest that biological control of a major cotton pest complex is preferred when risk aversion is an important component in grower decision making. Robustness of this result under alternative assumptions is indicated. Southern journal of agricultural economics - Southern Agricultural Economics Association. July 1983. v. 15 (1). p. 97-102. Includes 13 references. (NAL Call No.: HD101.S6).

0021

**The farm pesticide industry.**

Eichers, T.R. Washington, D.C., The Department. Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AG8A).

0022

**Interregional impacts of a pesticide ban under alternate farm programs: a linear programming analysis.**

Rovinsky, R.B. Reichelderfer, K.H. Washington, D.C., The Service. ESCS paper - United States Dept. of Agriculture, Economics, Statistics, and Cooperatives Service. Apr 1979. Available from NTIS - order no. PB80-153-380. Apr 1979. 13 p. 11 ref. (NAL Call No.: 919032(AGE)).

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**Risk preference and perceptions in the use of IPM (integrated pest management).**

Hanemann, W.M. Farnsworth, R.L. Berkeley, The Foundation. Working paper - Giannini Foundation of Agricultural Economics, Department of Agricultural and Resource Economics, California Agricultural Experiment Station. Mar 1980. Mar 1980. (83). 10 p. 11 ref. (NAL Call No.: 916970(AGE)).

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**Texas High Plains bollworm survey: a general summary of results.**

Sellar, C. Stoll, J.R.; Lacewell, R.D.; Walker, J.K.; Leser, J.F.; Ziemer, R.F. College Station, Tex. : The Station. Extract: Cotton is a major crop in the Southern High Plains region of Texas. In the past few years, concern about bollworm problems in cotton has been expressed by many growers. This study was initiated to assess status of the High Plains bollworm problem. Its focus is to: examine effectiveness of bollworm control measures; identify degree of insecticide uses; and estimate impact of bollworms upon cotton lint yields. The study was based on survey information gathered from cotton producers in a 20-county region of the Texas High Plains. Departmental technical report - Texas Agricultural Experiment Station. Dec 1982. Predominantly tables. Dec 1982. (82-2). 52 p. (NAL Call No.: HD1775.T4T5).

# ECONOMICS OF AGRIC. PRODUCTION

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Bishop, K.C. Saunders, F.B.; Wetzstein, M.E.; Perry, C.E. Athens, Ga. : The Stations. Research bulletin - University of Georgia, Experiment Stations. June 1984. June 1984. (312). 26 p. Includes 33 references. (NAL Call No.: S51.E2).

0026

**Beltwide boll weevil/cotton insect management programs: appendix B - economic evaluation.**  
United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.  
Extract: Alternative boll weevil/cotton insect management programs were evaluated for their effects on net market benefits and for their distributive impacts on producers and consumers. The Optimum Pest Management with No Incentives and Boll Weevil Eradication (OPM-NI-BWE) program produced the highest net market benefits, as measured by the sum of producer and consumer benefits less public program costs. Consumer benefits from lower prices greatly exceeded the loss of producer incomes and public costs. The Optimum Pest Management with No Incentive (OPM-NI) program produced the highest rate of return on Federal investment. A B/C ratio of 44:1 was obtained, compared with 17:1 for OPM-NI-BWE. ERS staff report - United States Dept. of Agriculture, Economic Research Service. June 5, 1981. Available from NTIS - order no. PB82-156-209. June 5, 1981. (AGESS810518). 68 p. maps. 20 ref. (NAL Call No.: 916762(AGE)).

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United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.  
Extract: Implementation plans were outlined and respective public costs were estimated for six beltwide boll weevil/cotton insect management programs in boll weevil-infested areas. Public cost is only one component of an economic evaluation of alternative programs. If fully implemented, annual public costs of the programs would be: current insect control (CIC), ~ .5 million; optimum pest management with incentives (OPM-I), \$36 million; OPM with phased incentives (OPM-PI), \$7 million; OPM with no incentives (OPM-NI) \$7 million; OPM-NI with boll weevil eradication (OPM-NI-BWE), \$7.5 million; and CIC-BWE, \$3 million. However, estimated public and private costs would total \$460 million during the 9 years to eradicate the boll weevil. Also, public costs for diapause treatments for the OPM program with phased incentives would total about \$61 million

during the 3 years of implementation. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1981. Available from NTIS. May 1981. (AGESS810504). 190 p. (NAL Call No.: 916762(AGE)).

0028

**Beltwide boll weevil/cotton insect management programs: appendix E - the Delphi: insecticide use and lint yields.**

United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service. The Delphi, a method for systematic collection of information from experts, was modified to obtain biological data required for the economic analysis of boll weevil/cotton insect management programs. Cotton insect management and crop production experts provided detailed data regarding the insecticide use patterns and cotton lint yields they projected would result under each of five alternative insect management options, in 35 subregions of cotton production. These data were used to estimate average insecticide use and cotton lint yield of six boll weevil/cotton insect management programs. Producers' average insect control costs under each program also were calculated from the information provided by the Delphi experts. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1981. Available from NTIS. May 1981. (AGESS810507). 123 p. (NAL Call No.: 916762(AGE)).

0029

**Beltwide boll weevil/cotton insect management programs: overall evaluation.**  
United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.  
Extract: Two boll weevil/cotton insect management trials, conducted during 1978-80, demonstrated the technical and operational feasibility of eradicating a boll weevil population from a geographic area or eliminating the need for boll weevil treatments during the cotton-growing season. Six cotton insect management programs were specified and evaluated for application in the boll weevil infested areas of the Cotton Belt. The Optimum Pest Management with No Incentive and Boll Weevil Eradication (OPM-NI-BWE) Program would yield substantially higher total economic and environmental benefits than the other programs. The OPM with No Incentive Program was estimated to yield the highest benefit/cost ratio in terms of public expenditures. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 15, 1981. Available from NTIS. May 15, 1981. (AGESS810721). 45 p. 16 ref. (NAL Call No.: 916762(AGE)).



# FARM ORGANIZATION AND MANAGEMENT

0030

**Bollworms: a new threat to High Plains cotton production (Yield losses, economic impact).**  
Leser, J.F. Memphis (etc.), Southwest Five-State Cotton Growers Association. Summary proceedings - Western Cotton Production Conference Western Cotton Production Conference. 1981. 1981. p. 31-33. (NAL Call No.: 72.8 W522).

0031

**Cost effectiveness of postemergence glyphosate and sethoxydim to johnsongrass in soybeans and cotton (Sorghum halepense, herbicides).**  
Derting, C.W.SWSPB. Sandberg, C.L.; Whatley, T.L.; Wu, C.H. Champaign : The Society. Proceedings - Southern Weed Science Society. 1983. 1983. (36th). p. 21-25. Includes references. (NAL Call No.: 79.9 S08).

0032

**An economic analysis of integrated pest management strategies for cotton production in the Coastal Bend Region of Texas.**  
Masud, S.M.TAEMA. Lacewell, R.D.; Taylor, C.R.; Benefict, J.H.; Lippke, L.A. College Station : The Station. Extract: This economic analysis of short-season cotton production under integrated pest management (IPM) strategies in the Coastal Bend Region of Texas consists of budgeting, breakeven and linear programming analysis. Analysis of data indicated that new IPM production systems provided higher yield and producer net returns by reducing per unit cost and variation in yields. Miscellaneous publication MP - Texas Agricultural Experiment Station. 1980. 1980. (1467). 45 p. Includes 20 references. (NAL Call No.: 100 T31M).

0033

**An economic evaluation of the Georgia Extension Service integrated pest management programs for cotton.**

Linder, D.K. Wetzstein, M.E.; Musser, W.N.; Douce, G.K. Athens, Ga. : The Stations. Extract: The overall objective of this study is to determine the effectiveness of the Georgia Cooperative Extension Service cotton Integrated Pest Management (IPM) programs. Specific objectives include 1) developing IPM participation indices using objective and subjective data, 2) comparing derived IPM indices across all growers, 3) relating the IPM indices to estimated production, cost, and return models in order to measure the impact of IPM on producers, and 4) determining whether growers are employing the optimal level of IPM and pesticide inputs. Research bulletin - University of Georgia, Experiment Stations. May 1983. May 1983. (293). 32 p. Includes 21 references. (NAL Call No.: S51.E2).

0034

**The economics of boll weevil eradication for South Carolina cotton producers.**  
Hammig, M.D. Jordan, J.W.; Griffin, R.P. Clemson : The Station. Extract: This report focuses on the economic ramifications of a federally operated boll weevil eradication program approved by South Carolina cotton producers in January 1983 from the growers' perspective. Results of grower surveys to ascertain historical costs of cotton insect control are presented and these results are used to project estimated time required for growers to recoup program costs under alternative scenarios of program effectiveness. Under the assumptions of this study, the control program showed positive internal rates of return over the 20-year planning horizon in all cases. The time required to pay the program costs varied from 3 to 10 years. Bulletin - South Carolina Agricultural Experiment Station. Aug 1983. Aug 1983. (650). 13 p. (NAL Call No.: 100 S08 (1)).

0035

**Efficacy and economics of weed control methods in cotton (*Gossypium hirsutum*).**  
Snipes, C.E.WEESA6. Walker, R.H.; Whitewell, T.; Buchanan, G.A.; McGuire, J.A. Champaign : Weed Science Society of America. Weed science. Jan 1984. v. 32 (1). p. 95-100. Includes references. (NAL Call No.: 79.8 W41).

0036

**Evaluation of farm level benefits of bollworm management communities (Cotton yields, production costs, Arkansas).**  
Scott, D.AKFRA. Cochran, M.; Nicholson, W.F. Jr. Fayetteville : The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Nov/Dec 1983. v. 32 (6). p. 3. (NAL Call No.: 100 AR42F).

0037

**History and cost of the pink bollworm (*Lepidoptera: Gelechiidae*) in the Imperial Valley (*Pectinophora gossypiella*, cotton pest, California).**  
Burrows, T.M.BESAA. Sevacherian, V.; Browning, H.; Baritelle, J. College Park : The Society. Bulletin of the Entomological Society of America. Sept 1982. v. 28 (3). p. 286-290. 11 ref. (NAL Call No.: 423.9 EN8).

0038

**Impact of alternative cotton insect management strategies on producer income in Mississippi (Simulation models).**  
Simpson, E.H. IIIXAAHA. Parvin, D.W. Jr. Washington : The Department. Agriculture handbook - United States Department of

## ( FARM ORGANIZATION AND MANAGEMENT )

Agriculture. Nov 1983. Includes statistical data. Nov 1983. (589). p. 481-496. maps. Includes references. (NAL Call No.: 1 AG84AH).

0039

### **Integrated pest management: is it profitable for cotton.**

Teague, P. Shulstad, R.N. Fayetteville, Ark. : The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Nov/Dec 1981. v. 30 (6). p. 4. (NAL Call No.: 100 AR42F).

0040

### **The potential impact of cotton insect control technology.**

LaDue, E.L. Shoemaker, C.; Russell, N.P.; Rovinsky, R.B.; Pimentel, D. Ithaca, N.Y., The Station. Cornell agricultural economics staff paper - Dept. of Agricultural Economics, Cornell University Agricultural Experiment Station. Aug 1979. Aug 1979. (79-31). 28 p. 20 ref. (NAL Call No.: HD1407.C6).

0041

### **Preliminary econometric analysis of cotton yield and optimum pest management in 1977 and 1978 (Trial in Mississippi and boll weevil eradication in North Carolina, production costs and returns).**

Lin, Y.N. MS. Smith, J.W.; Parvin, D.W. Jr. Mississippi State, The Station. AEC M.R. - Mississippi Agricultural and Forestry Experiment Station. Mar 1980. Mar 1980. (98). 27 p. 23 ref. (NAL Call No.: 100 M69MR).

0042

### **Short-season cotton production systems as an alternative to heavy applications of insecticides in the Mississippi Delta.**

Bieber, J.L. Lin, Y.N.; Parvin, D.W. Jr. Mississippi State, The Station. Extract: The objective of this paper is to examine the cost-return relationships of new technology involving early varieties, a truncated production season, and fewer pesticide treatments under Delta conditions where the principal insect pests are the cotton bollworm, *Heliothis zea* (Boddie), and the tobacco budworm, *Heliothis virescens* (F.). Concern with environmental problems associated with heavy pesticide use has brought about increased interest in alternative pest management strategies. This paper attempts to anticipate whether Delta cotton farmers will find short-season cotton production an acceptable alternative to current practices. AEC research report - Mississippi Agricultural and Forestry Experiment Station. July 1981. July 1981. (125). 31 p. 38 ref. (NAL Call No.: 917031(AGE)).

0043

**A total energy model for cotton production.** Sistler, F.E. Smith, P.A. Baton Rouge, The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Summer 1981. v. 24 (4). p. 22-23. (NAL Call No.: 100 L939).

# GRADING, STANDARDS, LABELLING

0044

**Aflatoxin solution is "in the bag" (Cottonseed processing, feed toxicity to cattle).**

June 1979. v. 94 (6). Progressive farmer for the West. June 1979. v. 94 (6). p. 49. ill. (NAL Call No.: 6 T311).

0045

**Chemical composition of cotton dust and its relation to byssinosis (on reducing the cotton dust in the air): a review of the literature (the specific respiratory disease).**

Cooke, T.F. Princeton, Textile Research Institute. Textile research journal. July 1979. v. 49 (7). p. 398-404. 73 ref. (NAL Call No.: 304.8 T293).

0046

**Determination of dimethoate residue in some vegetables and cotton plants.**

Belal, M.H. Gomaa, E.A.A. New York, Springer Verlag. Bulletin of environmental contamination and toxicology. Aug 1979. v. 22 (6). p. 726-730. ill. 5 ref. (NAL Call No.: RA1270.P35A1).

0047 0048

**The role of insects and other plant pests in aflatoxin contamination of corn, cotton, and peanuts--a review (Aspergillus species, feed and food contaminants, vectors). The role of insects and other plant pests in aflatoxin contamination of corn, cotton, and peanuts--a review (Aspergillus species, feed and food contaminants, vectors).**

Widstrom, N.W. Widstrom, N.W. Madison, American Society Of Agronomy. Madison, American Society Of Agronomy. Journal of environmental quality. Journal of environmental quality. Jan/Mar 1979. Jan/Mar 1979. v. 8 (1). v. 8 (1). p. 5-11. ill. p. 5-11. ill. 62 ref. (NAL Call No.: QH540.J6).(NAL Call No.: QH540.J6).

# CONSUMER ECONOMICS

0049

Dimilin: under a new marketing program (Boll weevil control throughout the cotton belt, United States).

Trammell, F.G. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference, 1983. 1983. p. 88. (NAL Call No.: 72.9 C8292).

# PLANT PRODUCTION - GENERAL

0050

**Coordinated field and laboratory procedures for the evaluation of cottonseed treatments / by John L. Ivey.**

Ivey, John L., 1942. 1970. Thesis (Ph.D.)--Louisiana State University and Agricultural and Mechanical College, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xii, 115 leaves : ill. ; 21 cm. Bibliography: leaves 111-114. (NAL Call No.: DISS 70-18,536).

0051

**Desiccant-type pesticides as aids to cotton (Boll dehiscence, machine harvesting).**

Goodin, P.L. Washington, U. S. Agricultural Research Service. Agricultural research. Jan 1979. v. 27 (7). p. 13. (NAL Call No.: 1.98 AG84).

0052

**The effect of seed quality and fungicide treatments on the microflora of cotton-field soil in the delta of Mississippi.**

Davis, R.G. Mississippi State, The Station. Technical bulletin - Mississippi Agricultural and Forestry Experiment Station. July 1981. July 1981. (109). 6 p. 5 ref. (NAL Call No.: S79.E8).

0053

**The effects of ozone on the growth, yield, and partitioning of dry matter in cotton.**

Oshima, R.J. Braegelmann, P.K. Madison, Wis., American Society of Agronomy. Journal of environmental quality. Oct/Dec 1979. v. 8 (4). p. 474-479. ill. 24 ref. (NAL Call No.: QH540.J6).

0054

**Effects of premature plant kill and hand defoliation on cotton performance.**

Bilbro, J.D. Wanjura, D.F. College Station, Tex., The Station. MP.Texas. Agricultural Experiment Station. Oct 1979. Oct 1979. (1436). 6 p. ill. 8 ref. (NAL Call No.: 100 T31M).

0055

**Evaluating new cotton varieties (Yields, insect resistance, *Lygus lineolaris*, *Pseudatomoscelis seriatus*).**

Boquet, D.J. Williams, B.R. Baton Rouge, Louisiana Agricultural Experiment Station. Louisiana agriculture. Spring 1979. v. 22 (3). p. 12-13. ill. (NAL Call No.: 100 L939).

0056

**Factors delaying maturity and limiting cotton yields in Alabama (Date of planting, nitrogen rates, pesticide damage).**

Gaylor, M.J. Buchanan, G.A. Auburn, The Station. Highlights of agricultural research. Alabama. Agricultural Experiment Station. Summer 1979. v. 26 (2). p. 3. ill. (NAL Call No.: 100 AL1H).

0057

**Influence of various insecticides on yield parameters of two cotton genotypes.**

Weaver, J.B. Jr. All, J.N. Baltimore, Entomological Society of America. Journal of economic entomology. Feb 15, 1979. v. 72 (1). p. 119-123. ill. 10 ref. (NAL Call No.: 421 J822).

0058

**Performance of multi-adversity resistant (MAR) cottons in the Texas Rolling Plains (Cultivars, yields, *Verticillium* wilt).**

Clark, L.E. Bourland, F.M. College Station, Tex., The Station. PR.Texas. Agricultural Experiment Station. May 1979. May 1979. (3560). 9 p. ill. 6 ref. (NAL Call No.: 100 T31P).

0059

**Pros and cons of stub cotton (in Arizona, insect control).**

Taylor, B.B. Hathorn, S. Jr. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. 1979. p. 25-26. ill. (NAL Call No.: SB249.N6).

0060

**Short season cotton in the Imperial Valley with special reference to pest management (*Pectinophora gossypiella*, yields).**

Walhood, V.T. Memphis (etc.), Southwest Five-State Cotton Growers Association. Summary proceedings - Western Cotton Production Conference. Western Cotton Production Conference. 1979. 1979. p. 48-51. (NAL Call No.: 72.8 W522).

0061

**Tamcot CAMD-E, a multi-adversity resistant cotton variety (Breeding for disease resistance).**

Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1720). 6 p. ill. (NAL Call No.: 275.29 T313).

**( PLANT PRODUCTION - GENERAL )**

**0062**

**Tamcot SP21S, a multi-adversity resistant cotton variety (Breeding for disease resistance).**

Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1721). 6 p. ill. (NAL Call No.: 275.29 T313).

**0063**

**Tamcot SP37H, a multi-adversity resistant cotton variety (Breeding for disease resistance).**

Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1672). 6 p. ill. (NAL Call No.: 275.29 T313).

**0064**

**Variety status for multiple disease resistant strains of cotton TAMCOT SP21, TAMCOT SP23, TAMCOT SP37 for controlling adversities in production.**

Bird, Luther S. College Station, Tex. Texas A&M University, The Dept. of Plant Sciences 1971. xiii, 129 leaves : ill. (NAL Call No.: SB249.B57).

# PLANT PRODUCTION - HORTICULTURAL CROPS

0085

**Response of cotton and corn grown in fumigated soils / by Joseph Herman Hurlimann.**

Hurlimann, Joseph Herman. (1974?). Thesis (Ph.D)--University of California, Berkeley, 1974. Photocopy. v, 94 leaves : ill. ; 28 cm. Bibliography: leaves 86-94. (NAL Call No.: SB973.3.H8).

# PLANT PRODUCTION - FIELD CROPS

0066

An analysis of the demand for inputs in cotton production at the Southeast Georgia Branch Station (Emphasis on labor, machinery, fertilizer, pesticides and seed, mathematical models).

Bishop, K.C. Saunders, F.B.; Wetzstein, M.E.; Perry, C.E. Athens, Ga. : The Stations. Research bulletin - University of Georgia, Experiment Stations. June 1984. June 1984. (312). 26 p. Includes 33 references. (NAL Call No.: S51.E2).

0067

Compendium of cotton diseases / G.M. Watkins, editor ; manuscript prepared by the Cotton Disease Council.

Watkins, G. M. St. Paul, Minn. (3340 Pilot Knob Road) American Phytopathological Society 1981. Includes bibliographies and index. vii, 87 p. : ill. (some col.) ; 28 cm. (NAL Call No.: SB608.C8C65).

0068

Cotton ball period response to water stress and pink bollworm (*Gossypium hirsutum*, *Pectinophora gossypiella*, early irrigation termination, Arizona).

Kittock, D.L. AGJDA. Henneberry, T.J.; Bariola, L.A.; Taylor, B.B.; Hofmann, W.C. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1983. v. 75 (1). p. 17-20. ill. 17 ref. (NAL Call No.: 4 AM34P).

0069

Cotton insect management with special reference to the boll weevil / edited by R.L. Ridgway, E.P. Lloyd, and W.H. Cross.

Ridgway, R. L.; Lloyd, E. P.; Cross, W. H.; (William H.). (Washington, D.C.?) U.S. Dept. of Agriculture, Agricultural Research Service for sale by the Supt. of Docs. 1983. "Issued November 1983.". xiii, 591 p. : ill., maps ; 23 cm. -. Includes bibliographies. (NAL Call No.: 1 Ag84Ah no.589).

0070

Cotton-soybean rotation for reniform nematode control (*Rotylenchulus reniformis*, resistant cultivars, Louisiana).

Williams, C.LAXBA. Gilman, D.F.; Jones, J.E.; Birchfield, W. Baton Rouge : The Station. Bulletin - Louisiana Agricultural Experiment Station. Jan 1983. Jan 1983. (741). 22 p. Includes references. (NAL Call No.: 100 L93 (1)).

0071

Crop rotation vs. monoculture. I. Insect control (Pests of maize, cotton, rice, soybeans, sorghum).

Barnes, G. Madison, Wis., American Society of Agronomy. Crops and soils magazine. Jan 1980. v. 32 (4). p. 15-17. ill. (NAL Call No.: 6 W55).

0072

Degree-days: an aid in crop and pest management (Cotton, *Heliothis zea*).

Wilson, L.T.CAGRA. Barnett, W.W. Berkeley : The Station. California agriculture - California Agricultural Experiment Station. Jan/Feb 1983. v. 37 (1/2). p. 4-7. ill. (NAL Call No.: 100 C12CAG).

0073

Development of cotton and associated beneficial and pest insect populations (*Heliothis*, *Pectinophora gossypiella*) in a ratoon field at Phoenix, Ariz.

Flint, H.M. AR-W-AR-W. Salter, S.S.; Walters, S. Washington, D.C., The Region. Agricultural reviews and manuals. ARM-W.United States. Dept. of Agriculture. Science and Education Administration. Western Region. May 1980. May 1980. (15). 14 p. 14 ref. (NAL Call No.: aS21.A75U64).

0074

Developmental times of *Heliothis zea* and *Heliothis virescens* (Lepidoptera: Noctuidae) and pupae in cotton (Mississippi).

Hogg, D.B. Calderon C., M. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1981. v. 10 (2). p. 177-179. ill. 11 ref. (NAL Call No.: QL461.E532).

0075

Economic impact of integrated pest management strategies for cotton production in the Coastal Bend Region of Texas.

Masud, S.M. Lacewell, R.D.; Taylor, C.R.; Benedict, J.H.; Lippke, L.A. Gainesville, Fla., Southern Agricultural Economics Assoc. Extract: This study examines the value and economic impact of short-season cotton production system under IPM strategies as it relates to yield and producer returns in the Coastal Bend Region of Texas. The study has implications for cotton producers, industry leaders, and other professionals for a better understanding of the economics of cotton production and for analyzing possible future production decisions relating to cotton. Southern journal of agricultural economics. Dec 1981. v. 13 (2). p. 47-52. 11 ref. (NAL Call No.: HD101.S6).



0076

**Effect of fungicide seed treatments and seed quality on seedling diseases and yield of cotton.**

Minton, E.B. Papavizas, G.C.; Lewis, J.A. St. Paul, Minn., American Phytopathological Society. Plant disease. Sept 1982. v. 66 (9). p. 832-835. 13 ref. (NAL Call No.: 1.9 P69P).

0077

**Effect of fungicides, insecticides, and their combinations on stand establishment and yield of cotton.**

Kappelman, A.J. Jr. St. Paul, Minn., American Phytopathological Society. Plant disease. Dec 1980. v. 64 (12). p. 1076-1078. 8 ref. (NAL Call No.: 1.9 P69P).

0078

**Effect of pest damage intensity on the growth, maturation, and yield of nectaried and nectariless cotton.**

Adjei-Mafo, I.K.EVETB. Wilson, L.T.; Thomson, N.J.; Blood, P.R.B. College Park : Entomological Society of America. Environmental entomology. Apr 1983. v. 12 (2). p. 353-358. Includes references. (NAL Call No.: QL461.E532).

0079

**Effects of row spacing and cotton cultivars on seedling diseases, verticillium wilt (caused by *Verticillium dahliae*), and yield.**

Minton, E.B. AR-S0. Madison, Wis., Crop Science Society of America. Crop science. May/June 1980. v. 20 (3). p. 347-350. 8 ref. (NAL Call No.: 64.8 C883).

0080

**Effects of tillage and herbicides on bermudagrass control in cotton (*Cynodon dactylon*), weeds, Mississippi Delta).**

Kurtz, M.E.RRMSD. Mississippi State : The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Nov 1982. v. 7 (20). 4 p. ill. Includes references. (NAL Call No.: S79.E37).

0081

**ES191 defoliation of cotton.**

Washington, D.C. Smithsonian Science Information Exchange 1976. Each leaf, "Notice of research project", provides title of project, researcher, performing, and supporting agencies for the project, with brief information on objective, approach, and progress. (19) leaves ; 28 cm. (NAL Call No.: SB608.C8E7).

0082

**Evaluation of farm level benefits of bollworm management communities (Cotton yields, production costs, Arkansas).**

Scott, D.AKFRA. Cochran, M.; Nicholson, W.F. Jr. Fayetteville : The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Nov/Dec 1983. v. 32 (6). p. 3. (NAL Call No.: 100 AR42F).

0083

**Field evaluation of cotton in Puerto Rico for pink bollworm resistance / by R.L. Wilson and F.D. Wilson.**

Wilson, R. L. Wilson, F. D. Berkeley, Calif. Agricultural Research (Western Region), Science and Education Administration, U.S. Dept. of Agriculture 1979. Caption title ~"February 1979.". 9 p. ; 26 cm. -. Includes bibliographical references. (NAL Call No.: AS21.A75U68 no.2).

0084

**Fruiting of cotton. I. Effects of moisture status on flowering (*Gossypium hirsutum*, water conservation, deficit irrigation, stress, Arizona).**

Guinn, G.AGJOAT. Mauney, J.R. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1984. v. 76 (1). p. 90-94. ill. Includes references. (NAL Call No.: 4 AM34P).

0085

**Fruiting of cotton. II. Effects of plant moisture status and active boll load on boll retention (*Gossypium hirsutum*, deficit irrigation, stress, water conservation, Arizona).**

Guinn, G.AGJOAT. Mauney, J.R. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1984. v. 76 (1). p. 94-98. ill. Includes references. (NAL Call No.: 4 AM34P).

0086

**General characteristics of selected cotton varieties (Performance, boll size, *Fusarium wilt* resistance).**

Bridge, R.R. Chism, J.F. Mississippi State, Miss. : The Station. Bulletin - Mississippi Agricultural & Forestry Experiment Station. Sept 1983. Sept 1983. (921). 5 p. Includes references. (NAL Call No.: S79.E3).

(PLANT PRODUCTION - FIELD CROPS)

0087

**Growth and development of the cotton plant in Arizona / Robert E. Dennis, Robert E. Briggs.**  
Dennis, Robert E. Briggs, Robert E. Tucson  
University of Arizona, Cooperative Extension  
Service (1981?). Caption title ~Pesticide  
Applicator Training collection ~"8168.". 7, (1)  
p. : ill. ; 28 cm. Bibliography: p. (8). (NAL  
Call No.: SB249.D46).

0088

**Herbicide field trials on field crops, 1980  
(Cotton, soybeans, yields).**  
Frans, R. McClelland, M.; Terhune, E.  
Fayetteville, Ark., The Station. Mimeograph  
series - Arkansas, Agricultural Experiment  
Station. Apr 1981. Apr 1981. (288). 62 p. (NAL  
Call No.: 100 AR42M).

0089

**Increase of cold tolerance in cotton plant  
(Gossypium Hirsutum L.) by mepiquat chloride /  
principal investigators S.Y. Huang ... (et  
al.).**  
Huang, S. Y. Houston, Tex. Lyndon B. Johnson  
Space Center, NASA Springfield, Va. for sale by  
National Technical Information Service 1982.  
AgRISTARS (Agriculture and Resources Inventory  
Surveys Through Aerospace Remote Sensing) is a  
joint program of the U.S. Dept. of Agriculture,  
the National Aeronautics and Space  
Administration, the National Oceanic and  
Atmospheric Administration, the Agency for  
International Development, and the U.S. Dept.  
of the Interior ~U.S. Dept. of Agriculture,  
Agricultural Research Service, Soil and Water  
Conservation Research ~"February 1982. ~Early  
warning and crop condition assessment  
EW-U2-04243. 8 leaves : ill. ; 28 cm. -.  
Includes bibliographical references. (NAL Call  
No.: SB249.I57).

0090

**Influence of cotton (Gossypium hirsutum)  
densities on competitiveness of pigweed  
(Amaranthus spp.) and sicklepod (Cassia.  
obtusifolia).**  
Street, J.E. Buchanan, G.A.; Crowley, R.H.;  
McGuire, J.A. Champaign, Ill., Weed Science  
Society of America. Weed science. May 1981. v.  
29 (3). p. 253-256. ill. 11 ref. (NAL Call No.:  
79.8 W41).

0091

**The influence of cultural practices on  
arthropod populations in cotton / Perry A.  
Glick.**  
Glick, Perry A. New Orleans, La. Agricultural  
Research Service, Southern Region, U.S. Dept.  
of Agriculture 1983. "January 1983.". vii, 52  
p. : ill., maps ; 26 cm. -. Bibliography: p.

51-52. (NAL Call No.: aS21.A75U65 no.32).

0082

**Influence of time of planting and distance from  
the cotton (Gossypium hirsutum) row of pitted  
morningglory (Ipomoea lacunosa), prickly sida  
(Sida spinosa), and redroot pigweed (Amaranthus  
retroflexus) on competitiveness with cotton.**  
Buchanan, G.A. Street, J.E.; Crowley, R.H.  
Champaign, Ill., Weed Science Society of  
America. Weed science. Sept 1980. v. 28 (5). p.  
568-572. ill. 13 ref. (NAL Call No.: 79.8 W41).

0093

**Insect populations in cotton produced under  
conservation tillage (Peridroma saucia, Lygus  
lineolaris, Heliothis spp., Gossypium hirsutum,  
Trifolium incarnatum, cutworms, tarnished plant  
bugs, bollworms, budworms, crimson clover).**  
Gaylor, M.J. Fleischer, S.J.; Muehleisen, D.P.;  
Edelson, J.V. Ankeny, IA : Soil Conservation  
Society of America. Journal of soil and water  
conservation. Jan/Feb 1984. v. 39 (1). p.  
61-64. Includes references. (NAL Call No.: 56.8  
J822).

0094

**Insecticide use on cotton in the United  
States--1969, 1972, and 1974.**  
Cooke, F.T. Jr. Parvin, D.W. Jr. Washington,  
D.C., The Service. Extract: There were dramatic  
increases in cost of insect control from 1969  
to 1974. The large increase in the usage of  
toxaphene and methyl parathion between 1972 and  
1974 reflect the impact of banning DDT. A  
mixture of these two insecticides was the best  
alternative to mixtures using DDT. Data on cost  
and quantities of specific major insecticides  
used on cotton is reported for the entire belt.  
Data on acres treated, cost per acre, and  
average number of applications per treated acre  
are included. ERS staff report - U.S. Dept. of  
Agriculture, Economic Research Service. Apr  
1981. Available from NTIS. Apr 1981.  
(AGESS810331). 19 p. 3 ref. (NAL Call No.:  
916762(AGE)).

0095

**Insecticide use on cotton in 1979.**  
McDowell, R. Marsh, C.; Osteen, C. Washington,  
D.C., The Service. Extract: In 1979, farmers  
reported they applied 22 million pounds (active  
ingredient) of insecticides in 30 million  
acre-treatments on 6.5 million acres of cotton.  
This consisted of 9.2 million pounds (a.i.) in  
19.8 million acre-treatments of single material  
applications and 12.8 million pounds (a.i.) in  
10.2 million acre-treatments of tank mixes. In  
1979, an average of 4.6 insecticide  
applications were made per treated acre with  
3.4 pounds of active ingredient being applied.  
Of the 30 million acre-treatments, 4.6 million

were in the Southeast, 10.6 million in the Delta, 8.4 million in the Southern Plains, and 6.3 million in the Far West. The primary insecticides used were methyl parathion, chlordimeform, permethrin, EPN, and fenvalerate. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1982. Available from NTIS. May 1982. (AGES820519). 51 p. 6 ref. (NAL Call No.: 916762(AGE)).

0096

**Interactions among a herbicide program, nitrogen fertilization, tarnished plant bugs, and planting dates for yield and maturity of cotton (*Gossypium hirsutum*, *Lygus lineolaris*, integrated pest management, Alabama).**  
Gaylor, M.J. AGUOA. Buchanan, G.A.; Gilliland, F.R.; Davis, R.L. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1983. v. 75 (6). p. 903-907. Includes references. (NAL Call No.: 4 AM34P).

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**Lint yield resistance to pink bollworm (*Pectinophora gossypiella*) in early-maturing cotton (Host plant resistance).**  
Wilson, F.D. George, B.W.; Wilson, R.L. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1981. v. 21 (2). p. 213-215. 12 ref. (NAL Call No.: 64.8 C883).

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**Long term effects of herbicides and cover crops on cotton yields.**  
Talbert, R. Frans, R.; Rogers, B.; Waddle, B.; Oakley, S. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 37-39. ill. Includes references. (NAL Call No.: 72.9 C8292).

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Garner, T.H. Memphis, Tenn., Meister. Cotton. International edition. 1981. 1981. p. 70, 72. ill. (NAL Call No.: 72.8 C8214I).

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**Plant resistance and modified cotton culture (*Anthonomus grandis*, integrated pest management, insect resistant cultivars).**  
Namken, L.N.XAAHA. Heilman, M.D.; Jenkins, J.N.; Miller, P.A. Washington : The Department of Agriculture handbook - United States Department of Agriculture. Nov 1983. Nov 1983. (589). p. 73-101. maps. Includes references. (NAL Call No.: 1 AG84AH).

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**Proceedings of the 1979 Beltwide Cotton Production-Mechanization Conference : and special sessions on decision making, key to production efficiencies, and new developments from agricultural chemical & equipment industries : January 7-11, 1979, Phoenix, Arizona / conference coordinator and editor, James M. Brown ; sponsored by National Cotton Council of America and the Cotton Foundation.**  
Brown, James M.; ed. Memphis, Tenn. National Cotton Council of America (1979). Cover title. 103 p. : ill. ; 28 cm. Includes bibliographical references. (NAL Call No.: SB249.B4 1979).

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**Relationships between seedborne microorganisms and cotton seedling emergence (*Aspergillus*, *Penicillium*, *Fusarium*).**  
Davis, R.G. Mississippi State, The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Apr 1982. v. 7 (1). 3 p. 2 ref. (NAL Call No.: S79.E37).

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**Response of cotton and corn grown in fumigated soils / by Joseph Herman Hurlimann.**  
Hurlimann, Joseph Herman. (1974?). Thesis (Ph.D)--University of California, Berkeley, 1974. Photocopy. v. 94 leaves : ill. ; 28 cm. Bibliography: leaves 86-94. (NAL Call No.: SB973.3.H8).

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Butler, G. D. Oakland, Calif. Agricultural Research Service (Western Region), U.S. Dept. of Agriculture 1982. Cover title ~"September 1982.". iv, 54 p. : ill. ; 27 cm. -. Bibliography: p. 43-49. (NAL Call No.: AS21.A75U64 no.27).

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(PLANT PRODUCTION - FIELD CROPS)

0106

**Short-season cotton production systems as an alternative to heavy applications of insecticides in the Mississippi Delta.**  
Bieber, J.L. Lin, Y.N.; Parvin, D.W. Jr. Mississippi State, The Station. Extract: The objective of this paper is to examine the cost-return relationships of new technology involving early varieties, a truncated production season, and fewer pesticide treatments under Delta conditions where the principal insect pests are the cotton bollworm, *Heliothis zea* (Boddie), and the tobacco budworm, *Heliothis virescens* (F.). Concern with environmental problems associated with heavy pesticide use has brought about increased interest in alternative pest management strategies. This paper attempts to anticipate whether Delta cotton farmers will find short-season cotton production an acceptable alternative to current practices. AEC research report - Mississippi Agricultural and Forestry Experiment Station, July 1981. July 1981. (125). 31 p. 38 ref. (NAL Call No.: 917031(AGE)).

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**Shortening the cotton season: can the savings in bug and water costs outweigh lower yield.**  
Fowler, R.G. AR. Tucson, The Service. Progressive agriculture in Arizona - Arizona University, Cooperative Extension Service. Spring 1980. v. 31 (2). p. 8-9. ill. (NAL Call No.: 6 P9452).

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**A slide rule for cotton crop and insect management.**  
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**'Sound reasons' undergird spread of Arizona's short season cotton (Yields, varieties, pests).**  
Cannon, M.D. Fisher, W. Fresno, Calif., Western Agricultural Publishing Co. California Arizona cotton. Aug 1980. v. 15 (8). p. 25-27. ill. (NAL Call No.: SB245.A1C3).

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**Timing late-season fruiting termination of cotton with potassium 3,4-dichloroisothiazole-5-carboxylate (Growth regulators, Pectinophora gossypiella, cultural control).**  
Kittock, D.L. AR-W. Arle, H.F.; Henneberry, T.J.; Bariola, L.A.; Walhood, V.T. Madison, Wis., Crop Science Society of America. Crop science. May/June 1980. v. 20 (3). p. 330-333. ill. 10 ref. (NAL Call No.: 64.8 C883).

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**The Western Delphi: insecticide use and lint yields in weevil-free areas of the cotton belt.**  
United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service. Extract: The Delphi, a method for systematic collection of information from experts, was modified to obtain biological data required for the economic analysis of current and potential cotton insect management practices in western regions of production where boll weevils do not pose a significant pest problem. Cotton insect management and crop production experts provided detailed data regarding current insecticide use patterns, and projected insecticide use and lint yields under an alternate, "optimal" insect management program. These data were used to estimate average cotton yield, insecticide use, and insect control costs under both current conditions and the alternative program for each of seven subregions of western cotton production. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1982. Available from NTIS. May 1982. (AGES820520). 80 p. 13 ref. (NAL Call No.: 916762(AGE)).

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# PLANT BREEDING

0116

**Adaptation of cotton genotypes to an acid, aluminum toxic soil.**

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**Adaptation of cotton genotypes to an acid, manganese toxic soil (Eastern Corn Belt soils).**

Foy, C.D. Webb, H.W.; Jones, J.E. Madison, Wis., American Society of Agronomy. Agronomy journal. Jan/Feb 1981. v. 73 (1). p. 107-111. ill. 14 ref. (NAL Call No.: 4 AM34P).

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**Approach to the evaluation of some factors affecting insect resistance in one 'Acala' and seven sister genotypes of Stoneville cotton in New Mexico.**

Ellington, J. Cardenas, M.; Kiser, K.; Guerra, L.; Salguero, V.; Ferguson, G. College Park, Md.: Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 612-618. Includes references. (NAL Call No.: 421 J822).

0119

**Bacterial blight of cotton: techniques and procedures for breeding resistant or immune cultivars (*Gossypium* spp., *Xanthomonas malvacearum*).**

Sappenfield, W.P. SCSBA. Mississippi State: Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 6-8. Includes references. (NAL Call No.: 100 G2950).

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**Breeding cotton cultivars resistant to whitefly (*Bemisia tabaci* (Genn)).**

Khalifa, H. NASSD. Gameel, O.I. New York: Plenum Press. NATO advanced study institutes series. Series A. Life sciences. 1983. v. 55. p. 231-236. Includes references. (NAL Call No.: QH301.N32).

0121

**Breeding cotton for resistance to the tobacco budworm: techniques to achieve uniform field infestations (*Heliothis virescens*, *Gossypium hirsutum*).**

Jenkins, J.N. Parrott, W.L.; McCarty, J.C. Jr.; White, W.H. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22

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0123

**Breeding for early maturity and Verticillium (dahliae) wilt tolerance in upland cotton.**

Cano-Rios, P. Davis, D.D. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1981. v. 21 (2). p. 319-321. 30 ref. (NAL Call No.: 64.8 C883).

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**California Acala board picks Arizona-tested GC 510 (New verticillium wilt-resistant cotton variety, developed in Arizona for use in San Joaquin Valley in California).**

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0128

**Characterization and performance evaluation of frege bract isolines of cotton (Breeding for insect resistance).**

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0129

**Combining ability for agronomic and fiber properties in cotton (breeding) stocks resistant to pink bollworm (Pectinophora gossypiella).**

Wilson, F.D. George, B.W. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1980. v. 20 (5). p. 563-566. 15 ref. (NAL Call No.: 64.8 C883).

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**Combining ability in cotton for resistance to pink bollworm (Pectinophora gossypiella).**

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0132

**Cotton cultivars resistant to the pink bollworm (Pectinophora gossypiella).**

Wilson, F.D. AR-W-AR-W. Washington, D.C., The Region. Agricultural reviews and manuals. ARM-W - United States, Dept. of Agriculture, Science and Education Administration, Western Region. June 1980. June 1980. (16). p. 46-51. 13 ref. (NAL Call No.: aS21.A75U64).

0133

**Early-maturing, wilt resistant cotton for narrow-row cultivation in California (Verticillium, cultivars).**

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0134

**Effect of pink bollworm on agronomic properties of resistant and susceptible cotton (Cultivar, resistant breeding stock, Pectinophora gossypiella).**

Wilson, F.D. CRPSA. George, B.W. Madison : Crop Science Society of America. Crop science. July/Aug 1982. v. 23 (4). p. 695-698. Includes references. (NAL Call No.: 64.8 C883).

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**Effect of species cytoplasm and morphological traits on resistance to the boll weevil (Anthonomus grandis) in Upland cotton.**

Jones, J.E. LA. Bowman, D.T.; Brand, J.W.; Pavloff, A.M. Baton Rouge, The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. Louisiana. Agricultural Experiment Station. Dept. of Agronomy. 1979. 1979. p. 15-17. (NAL Call No.: 100 L936).

0136

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0138

**Effects of okra-leaf, frege-bract, and smooth-leaf mutants on pink bollworm damage and agronomic properties of cotton (Host-plant resistance, Pectinophora gossypiella).**

Wilson, F.D. George, B.W. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1982. v. 22 (4). p. 798-801. 6 ref. (NAL Call No.: 64.8 C883).

0139

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**Evaluation of early fruiting cotton strains for relative attractiveness to the boll weevil for possible use in boll weevil trap plantings.**

Jones, J.E. Stringer, S.J.; Beasley, J.P.; Clower, D.F.; Burris, E. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 32-36. (NAL Call No.: 100 L936).

0141

**Evaluation of foreign and domestic cotton cultivars and strains for boll weevil resistance (*Anthonomus grandis*).**

Lambert, L. Jenkins, J.N.; Parrott, W.L.; McCarty, J.C. Madison, Wis., Crop Science Society of America. Crop science. Nov/Dec 1980. v. 20 (6). p. 804-806. 16 ref. (NAL Call No.: 64.8 C883).

0142

**Evaluation of thirty-eight foreign and domestic cotton cultivars for tarnished plant bug resistance (*Lygus lineolaris*).**

Lambert, L. MS-AR-SD. Jenkins, J.N.; Parrott, W.L.; McCarty, J.C. Mississippi State, The Station. Research report - Mississippi Agricultural & Forestry Experiment Station. June 1980. v. 5 (1). 4 p. 11 ref. (NAL Call No.: S79.E37).

0143

**Four disease-resistant cotton germplasms (*Gossypium hirsutum*).**

Kappelman, A.U. Jr. CRPSAY. Madison : Crop Science Society of America. Crop science. Sept/Oct 1983. v. 23 (5). p. 1018-1019. Includes references. (NAL Call No.: 64.8 C883).

0144

**Fusarium (*oxysporum vasinfectum*) wilt resistance in day-neutral selections from primitive races of cotton and crosses of race selections with a commercial cultivar.**

Kappelman, A.U. Jr. AR-SD. Jenkins, J.N.; Parrott, W.L. Madison, Wis., Crop Science

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0145

**General characteristics of selected cotton varieties (Performance, boll size, Fusarium wilt resistance).**

Bridge, R.R. Chism, J.F. Mississippi State, Miss. : The Station. Bulletin - Mississippi Agricultural & Forestry Experiment Station. Sept 1983. Sept 1983. (921). 5 p. Includes references. (NAL Call No.: S79.E3).

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**General characteristics of selected cotton varieties (Seeds, bolbs, linters, Fusarium wilt).**

Bridge, R.R. Chism, J.F. Mississippi State, Miss. : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Feb 1984. v. 47 (2). p. 5-7. ill. Includes references. (NAL Call No.: 100 M69MI).

0147

**Generation mean analyses of various allelochemicals in cottons (*Host-plant resistance, Heliothis virescens*).**

White, W.H. Jenkins, J.N.; Parrott, W.L.; McCarty, J.C.; Collum, D.H.; Hedin, P.A. Madison, Crop Science Society of America. Crop science. Sept/Oct 1982. v. 22 (5). p. 1046-1049. 17 ref. (NAL Call No.: 64.8 C883).

0148

**A genetic and breeding study of pink bollworm resistance and agronomic properties in cotton (*Pectinophora gossypiella*, *Gossypium hirsutum*).**

Wilson, F.D. CRPSA. George, B.W. Madison : Crop Science Society of America. Crop science. Jan/Feb 1983. v. 23 (1). p. 1-4. Includes references. (NAL Call No.: 64.8 C883).

0149

**Genetic variability among glandless cottons for resistance to two insects (*Heliothis virescens*, *Lygus lineolaris*).**

Meredith, W.R. Jr. Hanny, B.W. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1979. v. 19 (5). p. 651-653. ill. 17 ref. (NAL Call No.: 64.8 C883).



0150

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Webster, G. Phoenix, Ariz. : Elliott L. Cushman. Arizona farmer rancher. Aug 1984. v. 63 (8). p. 21, 40. ill. (NAL Call No.: 6 AR44).

0151

**Genotype X environment interaction of cottons varying in insect resistance.**

McCarty, J.C. Jr. CRPSAY. Meredith, W.R.; Jenkins, J.N.; Parrott, W.L.; Bailey, J.C. Madison : Crop Science Society of America. Crop science. Sept/Oct 1983. v. 23 (5). p. 970-973. Includes references. (NAL Call No.: 64.8 C883).

0152

**Germplasm release of Fusarium (oxysporum vasinfectum) wilt-resistant, non-commercial stocks of cotton involving Gossypium hirsutum L. race accessions (Breeding for disease resistance).**

Jenkins, J.N. McCarty, J.C. Mississippi State, The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Mississippi. Agricultural and Forestry Experiment Station. July 1979. v. 4 (20). 3 p. ill. (NAL Call No.: S79.E37).

0153

**Greenhouse technique for evaluating resistance to the bandedwinged whitefly (Homoptera: Aleyrodidae) used to evaluate thirty-five foreign cotton cultivars (Trialeurodes abutilonea, southeastern USA).**

Lambert, L. JEENA. Jenkins, J.N.; Parrott, W.L.; McCarty, J.C. College Park : Entomological Society of America. Journal of economic entomology. Dec 1982. v. 75 (6). p. 1166-1168. 7 ref. (NAL Call No.: 421 JB22).

0154

**Highlights of the 1980 Cotton Improvement Conference (Breeding for resistance to key insect pests).**

Davis, D.D. Memphis, National Cotton Council. Proceedings - Beltwide Cotton Production Research Conference. 1981. 1981. p. 56-57. ill. (NAL Call No.: SB249.N6).

0155

**Indices of resistance to root-knot nematodes for primitive race stocks of upland cotton (Meloidogyne incognita).**

Shepherd, R.L. New Orleans : The Service. Agricultural reviews and manuals. ARM-S - United States, Dept. of Agriculture,

Agricultural Research Service, Southern Region. Aug 1983. Aug 1983. (33). 8 p. Includes references. (NAL Call No.: aS21.A75U65).

0156

**Indirect selection for resistance to the fusarium wilt-root-knot nematode complex in cotton (Fusarium oxysporum f. vasinfectum, Meloidogyne spp.).**

Kappelman, A.U. Jr. Bird, L.S. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1981. v. 21 (1). p. 66-68. 16 ref. (NAL Call No.: 64.8 C883).

0157

**Induced resistance of cotton seedlings to mites (Tetranychus urticae, Tetranychus turkestanii, Tetranychus pacificus).**

Karban, R. Carey, J.R. Washington, D.C. : American Association for the Advancement of Science. Science. July 6, 1983. v. 225 (4657). p. 53-54. ill. Includes references. (NAL Call No.: 470 SCI2).

0158

**Influence of five Gossypium species cytoplasm on yield, yield components, fiber properties, and insect resistance in upland cotton.**

Meredith, W.R. Jr. Meyer, V. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1979. v. 19 (5). p. 647-650. ill. 3 ref. (NAL Call No.: 64.8 C883).

0159

**Influence of Gossypium cytoplasm on expression of bacterial blight (Cotton breeding and genetics, cultivars, Xanthomonas malvacearum).**

Mahill, J.F. RRMSD. Jenkins, J.N.; Meredith, W.R. Jr.; Meyer, V. Mississippi State : The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Oct 1982. v. 7 (17). 3 p. Includes references. (NAL Call No.: S79.E37).

0160

**Influence of soil temperature on Meloidogyne incognita and resistant and susceptible cotton, Gossypium hirsutum (Cultivars, root-knot nematode).**

Carter, W.W. Ames, Iowa, Society of Nematologists. Journal of nematology. July 1982. v. 14 (3). p. 343-346. ill. 17 ref. (NAL Call No.: QL391.N4J62).

0161

**Inheritance and interrelations of some seedling disease escape characteristics in cotton, *Gossypium hirsutum* L. / by Salem Abdel-Kirim Abd-Alla.**

Abd-Alla, Salem Abdel-Kirim, 1936. 1970. Thesis (Ph.D.)--Texas A&M University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. viii, 97 leaves ; 21 cm. Bibliography: leaves 92-96. (NAL Call No.: DISS 71-17,790).

0162

**Inheritance of gossypol in leaves and flower buds of cotton and its relationship to insect and disease resistance / by Indra Deo Singh.**

Singh, Indra Deo, 1945. 1971. Thesis (Ph.D.)--University of Georgia, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1972. v, 91 leaves ; 21 cm. Includes bibliographies. (NAL Call No.: DISS 72-2,545).

0163

**Linkage relationships between the B4 gene for bacterial blight resistance and genes for pollen color, lint percentage and seedling traits in *Gossypium hirsutum* L. / by Mohamed-Aly Fathalla Tayel.**

Tayel, Mohamed-Aly Fathalla, 1930. 1972. Thesis (Ph.D.)--Texas A&M University, 1972. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. 53 leaves ; 21 cm. Bibliography: leaves 50-52. (NAL Call No.: DISS 72-24,338).

0164

**Long-term progress made by cotton breeders in developing fusarium wilt (*Fusarium oxysporum*) resistant germplasm.**

Kappelman, A.J. Jr. AR-SO. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1980. v. 20 (5). p. 613-615. ill. 13 ref. (NAL Call No.: 64.8 C883).

0165

**The MAR (Multi-Adversity Resistance) system for genetic improvement of cotton.**

Bird, L.S. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1982. v. 66 (2). p. 172-176. ill. Includes 13 ref. (NAL Call No.: 1.9 P69P).

0166

**Methods: evaluating cotton for resistance to plant bugs (*Lygus lineolaris*, *Lygus hesperus*, *Pseudatomoscelis seriatus*, *Gossypium* spp., genotypes, cultivars).**

Tugwell, N.P. Jr. SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 46-53. Includes references. (NAL Call No.: 100 G29S0).

0167

**Methods for developing cottons with resistance to root rot, *Phymatotrichum omnivorum* (Shear) Duggar (Cultivar comparisons).**

Bird, L.S. SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 16. Includes references. (NAL Call No.: 100 G29S0).

0168

**Methods of analyzing the genetics and breeding for tolerance to *Verticillium* wilt (in *Acala* cotton).**

Barrow, J.R. SCSBA. Malm, N.R.; Roberts, C. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 58-59. (NAL Call No.: 100 G29S0).

0169

**Methods of evaluating cotton for resistance to pink bollworm, cotton leafperforator, and lygus bugs (*Gossypium* spp., *Pectinophora gossypiella*, *Bucculatrix thurberiella*, *Lygus hesperus*).**

George, B.W. SCSBA. Wilson, F.D.; Wilson, R.L. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 41-45. Includes references. (NAL Call No.: 100 G29S0).

0170

**Methods of evaluating cotton for resistance to the boll weevil (*Anthonomus grandis*, *Gossypium* spp., comparisons, cotton lines).**

Benedict, J.H. SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 19-26. Includes references. (NAL Call No.: 100 G29S0).

0171

**Methods of screening cotton for resistance to *Heliothis* spp. (*Gossypium hirsutum*, includes procedure for determining gossypol content of flower buds).**

Dilday, R.H.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 26-36. Includes references. (NAL Call No.: 100 G2950).

0172

**Nectariless cotton: effect on growth, survival, and fecundity of lygus bugs (*Lygus hesperus*).**

Benedict, J.H. Leigh, T.F.; Hyer, A.H.; Wynholds, P.F. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1981. v. 21 (1). p. 28-30. 10 ref. (NAL Call No.: 64.8 C883).

0173

**A new linkage relationship in cotton (Complementary lethality, inherited disorders).**

Lee, J.A. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1981. v. 21 (2). p. 346-347. 6 ref. (NAL Call No.: 64.8 C883).

0174

**New sources of resistance to root-knot nematodes among primitive cottons (*Gossypium hirsutum*, *Meloidogyne incognita*, cotton breeding, genetic vulnerability).**

Shepherd, R.L.CRPSAY. Madison : Crop Science Society of America. Crop science. Sept/Oct 1983. v. 23 (5). p. 999-1002. ill. Includes references. (NAL Call No.: 64.8 C883).

0175

**No-choice study of plant-insect interactions for *Heliothis zea* (Boddie) (Lepidoptera: Noctuidae) on selected cottons.**

Zummo, G.R.EVETB. Benedict, J.H.; Segers, J.C. College Park : Entomological Society of America. Environmental entomology. Dec 1983. v. 12 (6). p. 1833-1836. Includes references. (NAL Call No.: QL461.E532).

0176

**Orange and yellow cotton pollens retard growth of tobacco budworm larvae (*Heliothis virescens*).**

Bailey, J.C.GENSA. Athens : The Society. Journal of the Georgia Entomological Society. Jan 1983. v. 18 (1). p. 9-11. Includes references. (NAL Call No.: QL461.G4).

0177

**Pink bollworm (Lepidoptera: Gelechiidae): oviposition and larval success on resistant and susceptible cotton plants (*Pectinophora gossypiella*).**

Wilson, F.D. George, B.W.; Szaro, J.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 709-714. Includes references. (NAL Call No.: 421 J822).

0178

**Pink bollworm (Lepidoptera: Gelechiidae): selecting for antibiosis in artificially and naturally infested cotton plants (*Pectinophora gossypiella*).**

Wilson, F.D. George, B.W. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 720-724. Includes references. (NAL Call No.: 421 J822).

0179

**Pink bollworm (*Pectinophora gossypiella*): expected reduction in damage to cottons carrying combinations of resistance characters.**

Wilson, F.D. AR-W-AR-W. Wilson, R.L.; George, B.W. Oakland, Calif., The Region. Agricultural research results ARR-W - U.S. Dept. of Agriculture, Science and Education Administration. United States. Dept. of Agriculture. Science and Education Administration. Agricultural Research. Western Region. Mar 1980. Mar 1980. (12). 10 p. ill. 20 ref. (NAL Call No.: aS21.A75U68).

0180

**Plant resistance and modified cotton culture (*Anthonomus grandis*, integrated pest management, insect resistant cultivars).**

Namken, L.N.XAAHA. Heilman, M.D.; Jenkins, J.N.; Miller, P.A. Washington : The Department. Agriculture handbook - United States Department of Agriculture. Nov 1983. Nov 1983. (589). p. 73-101. maps. Includes references. (NAL Call No.: 1 AG84AH).

0181

**Potential of *Heliothis* spp. (Lepidoptera: Noctuidae)-resistant cottons in limited-irrigation situations.**

Slosser, J.E.JEENA. College Park : Entomological Society of America. Journal of economic entomology. Aug 1983. v. 76 (4). p. 864-868. Includes references. (NAL Call No.: 421 J822).

0182

**A quantitative technique for evaluating cotton for root-knot nematode resistance (*Meloidogyne incognita acrita*, breeding for resistance).**  
Shepherd, R.L. St. Paul, American Phytopathological Society. *Phytopathology*. Apr 1979. v. 69 (4). p. 427-430. 111. 20 ref. (NAL Call No.: 464.8 P56).

0183

**A quantitative technique for evaluating cotton for root-knot nematode resistance (*Meloidogyne incognita acrita*, *Gossypium* spp., breeding lines, comparisons).**  
Shepherd, R.L.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 1-6. Includes references. (NAL Call No.: 100 G2950).

0184

**Registration of HYC79-6 cotton germplasm (Breeding for disease and pest resistance).**  
Sappenfield, W.P. Madison, Wis. : Crop Science Society of America. *Crop science*. July/Aug 1984. v. 24 (4). p. 829. Includes references. (NAL Call No.: 64.8 C883).

0185

**Registration of three okra-leaf, frego-bract disease resistant cotton germplasms.**  
Kappelman, A.J. Jr. Madison, Wis., Crop Science Society of America. *Crop science*. May/June 1982. v. 22 (3). p. 693-694. (NAL Call No.: 64.8 C883).

0186

**Research methods for cotton resistance to spider mites (*Tetranychus*, *Gossypium*).**  
Leigh, T.F.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 56-58. Includes references. (NAL Call No.: 100 G2950).

0187

**Resistance of cotton, *Gossypium hirsutum* L., to natural field populations of twospotted spider mites (Acari: Tetranychidae) (*Tetranychus urticae*).**  
Bailey, J.C.EVETB. Meredith, W.R. Jr. College Park : Entomological Society of America. *Environmental entomology*. June 1983. v. 12 (3). p. 763-764. Includes references. (NAL Call No.:

QL461.E532).

0188

**Resistance to fusarium wilt pathogen in currently used cotton cultivars (*Gossypium*, *Fusarium oxysporum*).**  
Kappelman, A.J. Jr. St. Paul, Minn., American Phytopathological Society. *Plant disease*. Sept 1982. v. 66 (9). p. 837-839. 11 ref. (NAL Call No.: 1.9 P69P).

0189

**Resistance to pink bollworm (*Pectinophora gossypiella*) in breeding stocks of upland cotton.**  
Wilson, F.D. Wilson, R.L.; George, B.W. College Park, Md., Entomological Society of America. *Journal of economic entomology*. Aug 1980. v. 73 (4). p. 502-505. 8 ref. (NAL Call No.: 421 J822).

0190

**Screening and evaluation methods: resistance of cotton to seedling pathogens and seed deterioration (Mainly fungi and bacteria caused).**  
Holloin, J.M.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 12-16. Includes references. (NAL Call No.: 100 G2950).

0191

**Screening cotton for resistance to pink bollworm (*Pectinophora gossypiella*).**  
Wilson, F.D. George, B.W.; Wilson, R.L. Washington, D.C., The Region. Agricultural reviews and manuals; ARM-W - United States, Dept. of Agriculture, Science and Education Administration, Western Region. June 1981. June 1981. (22). 22 p. 11 ref. (NAL Call No.: aS21.A75U64).

0192

**Screening cotton for resistance to spider mites (*Tetranychus* spp., *Gossypium*).**  
Schuster, M.F.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 54-56. (NAL Call No.: 100 G2950).

0193

**Screening for Verticillium wilt resistance in cotton (*Verticillium dahliae*, *Gossypium* varieties).**

Howell, C.R.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 17-18. Includes references. (NAL Call No.: 100 G295D).

0194

**Strain and within-season variability of various allelochemics within a diverse group of cottons (Host plant resistance, *Heliothis virescens*).**

White, W.H.CRPSA. Jenkins, J.N.; Parrott, W.L.; McCarty, J.C.; Collum, D.H.; Hedin, P.A. Madison : Crop Science Society of America. Crop science. Nov/Dec 1982. v. 22 (6). p. 1235-1238. 14 ref. (NAL Call No.: 64.8 C883).

0195

**Tamcot CAMD-E, a multi-adversity resistant cotton variety (Breeding for disease resistance).**

Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1720). 6 p. ill. (NAL Call No.: 275.29 T313).

0196

**Tamcot SP21S, a multi-adversity resistant cotton variety (Breeding for disease resistance).**

Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1721). 6 p. ill. (NAL Call No.: 275.29 T313).

0197

**Tamcot SP37H, a multi-adversity resistant cotton variety (Breeding for disease resistance).**

Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1672). 6 p. ill. (NAL Call No.: 275.29 T313).

0198

**Testing of cotton varieties on wilt (*Fusarium* and *Verticillium*)--rootknot nematode infested soil.**

Caldwell, W.D. LA. Jones, J.E.; Graham, M.M. Bossier City, The Station. Annual research report - Red River Valley Agricultural Experiment Station. Louisiana. Red River Valley Agricultural Experiment Station. 1979. 1979. p.

14-20. (NAL Call No.: 100 L9333).

0199

**Tolerance differential of eight cotton cultivars and genotypes to solution manganese (*Gossypium hirsutum*, *Gossypium barbadense*, phytotoxicity).**

Kennedy, C.W. Smith, W.C.; Jones, J.E. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 57-58. (NAL Call No.: 100 L936).

0200

**Use of glandless breeding stocks to evaluate unknown *Heliothis* growth inhibitor (X-factors) in cotton.**

Shaver, T.N. AR-W-AR-W. Dilday, R.H.; Wilson, F.D. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1980. v. 20 (4). p. 545-548. 16 ref. (NAL Call No.: 64.8 C883).

0201

**Variability in flower-bud gossypol content and agronomic and fiber properties within the primitive race collection of cotton (Breeding stocks tested for resistance to the tobacco budworm, *Heliothis virescens*).**

Dilday, R.H. AR-SO. Shaver, T.N. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1980. v. 20 (1). p. 91-95. ill. 13 ref. (NAL Call No.: 64.8 C883).

0202

**Water relations and carbon-14 assimilation of cotton with different leaf morphology (Genotypic differences, stress).**

Karami, E. AR-SO. Krieg, D.R.; Quisenberry, J.E. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1980. v. 20 (4). p. 421-426. ill. 24 ref. (NAL Call No.: 64.8 C883).

# PLANT ECOLOGY

0203

**Competition of common cocklebur (*Xanthium pensylvanicum*) with cotton (*Gossypium hirsutum*) (Weed biology).**

Snipes, C.E. Buchanan, G.A.; Street, J.E.; McGuire, J.A. Champaign, Ill., Weed Science Society of America. Weed science. Sept 1982. v. 30 (5). p. 553-556. ill. 10 ref. (NAL Call No.: 79.8 W41).

0204

**The effect of temperature on the chemical composition of hypocotyls of cotton and on the seedling disease incited by *Rhizoctonia solani* / by Richard E. Hunter.**

Hunter, Richard E. (Richard Edmund), 1923. 1968. Thesis (Ph.D.)--Oklahoma State University, 1968. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. viii, 68 leaves : ill. ; 21 cm. Bibliography: leaves 56-59. (NAL Call No.: DISS 69-14,264).

0205

**Weed competition in agronomic crops (Alfalfa, cotton, wheat, barley).**

Cudney, D.W. Sacramento : California Weed Conference Office. Proceedings - California Weed Conference. 1981. 1981. (33rd). p. 9-12. (NAL Call No.: 79.9 C122).

0206

**Within-plant distribution of spider mites (Acari: Tetranychidae) on cotton: a developing implementable monitoring program (Tetranychus).**

Wilson, L.T. EVETB. Gonzalez, D.; Leigh, T.F.; Maggi, V.; Foristiere, C. College Park : Entomological Society of America. Environmental entomology. Feb 1983. v. 12 (1). p. 128-134. Includes references. (NAL Call No.: QL461.E532).

# PLANT STRUCTURE

0207

**Cotyledon and leaf ultrastructure of a bacterial blight-immune cotton line inoculated with a low level of *Xanthomonas campestris* pv. *malvacearum* (*Gossypium hirsutum*).**

Al-Mousawi, A.H. Richardson, P.E.; Essenberg, M.; Johnson, W.M. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Sept 1982. v. 72 (9). p. 1230-1234. ill. 13 ref. (NAL Call No.: 464.8 P56).

0208

**Histopathology of cotton boll rot caused by *colletotrichum capsici* (*Gossypium hirsutum*).**

Roberts, R.G. Snow, J.P. St. Paul, Minn. : American Phytopathological Society. *Phytopathology*. 1984. v. 74 (4). p. 390-397. ill. Includes references. (NAL Call No.: 464.8 P56).

0209

**Ultrastructural studies of a compatible interaction between *Xanthomonas campestris* pv. *malvacearum* and cotton (*Gossypium hirsutum*, bacterial blight).**

Al-Mousawi, A.H. Richardson, P.E.; Essenberg, M.; Johnson, W.M. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Sept 1982. v. 72 (9). p. 1222-1230. ill. 25 ref. (NAL Call No.: 464.8 P56).

# PLANT NUTRITION

0210

**Desiccant-type pesticides as aids to cotton (Boll dehiscence, machine harvesting).**

Goodin, P.L. Washington, U. S. Agricultural Research Service. Agricultural research. Jan 1979. v. 27 (7). p. 13. (NAL Call No.: 1.98 AG84).

0211

**Effect of (the herbicide) glyphosate on auxin transport in corn and cotton tissues.**

Baur, J.R. Bethesda, American Society of Plant Physiologists. Plant physiology. May 1979. v. 63 (5). p. 882-886. ill. 22 ref. (NAL Call No.: 450 P692).

0212

**Growth retardants mitigate Verticillium (dahliae) wilt and influence yield of cotton.**

Erwin, D.C. Tsai, S.D. St. Paul, American Phytopathological Society. Phytopathology. Mar 1979. v. 69 (3). p. 283-287. ill. 27 ref. (NAL Call No.: 464.8 P56).

0213

**The integrated control of the arthropod, disease, and weed pests of cotton, grain sorghum and deciduous fruit.**

College Station, Tex. Texas Agricultural Experiment Station 1976. viii, 216 p. : ill. : 28 cm. -. Includes bibliographies. (NAL Call No.: 100 T31M No.1276).

0214

**Predicting population cycles of the pink bollworm (*Pectinophora gossypiella*, pest of cotton) by thermal summation (in southern California).**

Toscano, N.C. Van Steenwyk, R.A. Baltimore, Entomological Society of America. Journal of economic entomology. Feb 15, 1979. v. 72 (1). p. 144-147. ill., map. 13 ref. (NAL Call No.: 421 J822).

0215

**Synthetic route to an aromatic analogue of strigol (Isolated from the root exudates of cotton, used in weed control).**

Kendall, P.M. Johnson, J.V. Easton, Pa., American Chemical Society. Journal of organic chemistry. Apr 17, 1979. v. 44 (9). p. 1421-1424. ill. 13 ref. (NAL Call No.: 381 J827).



# PLANT PHYSIOLOGY AND BIOCHEMISTRY

0216

**Absorption, translocation, and fate of the herbicide, 2-(3,4-dichlorophenyl)-4-methyl-1,2,4-oxadiazolidine-3,5-dione, in cotton / by Donald Wayne Jones.**

Jones, Donald Wayne, 1941. 1971. Thesis (Ph.D.)--Virginia Polytechnic Institute and State University, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. xi, 79 leaves ; 21 cm. Includes bibliographies. (NAL Call No.: DISS 72-12,507).

0217

**Association of cotton nectar production with *Heliothis punctigera* (Lepidoptera: Noctuidae) oviposition.**

Adjei-Maafu, I.K.EVETB. Wilson, L.T. College Park : Entomological Society of America. Environmental entomology. Aug 1983. v. 12 (4). p. 1166-1170. Includes references. (NAL Call No.: QL461.E532).

0218

**Causes of square and boll shedding in cotton (Abscission, environmental conditions, hormonal balance, enzyme activities).**

Guinn, G. Washington : The Department. Technical bulletin - United States Dept. of Agriculture. Sept 1982. Literature review. Sept 1982. (1672). 22 p. ill. 8 p. ref. (NAL Call No.: 1 AG84TE).

0219

**Chemistry of resistance (Includes annotated list of published reviews concerning the importance of terpenoids and flavanols in cotton pest resistance).**

Bell, A.A.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 59-61. Includes references. (NAL Call No.: 100 G29S0).

0220

**Comparative degradation of the pyrethroids tralomethrin, traloccythrin, deltamethrin, and cypermethrin on cotton and bean foliage.**

Cole, L.M. Casida, J.E.; Ruzo, L.D. Washington, American Chemical Society. Journal of agricultural and food chemistry. Sept/Oct 1982. v. 30 (5). p. 916-920. 2 p. ref. (NAL Call No.: 381 J8223).

0221

**Constituents (volatile compounds) of mustard, goldenrod, and croton--three host plants of the tarnished plant bug (*Lygus lineolaris*, pest of cotton).**

Gueidner, R.C. Parrott, W.L. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. Mar/Apr 1981. v. 29 (2). p. 418-420. 10 ref. (NAL Call No.: 381 J8223).

0222

**Cotton allelochemicals and growth of tobacco budworm larvae (Plant resistance, genetics, *Heliothis virescens*).**

Jenkins, J.N.CRPSAY. Hedin, P.A.; Parrott, W.L.; McCarty, J.C. Jr.; White, W.H. Madison : Crop Science Society of America. Crop science. Nov/Dec 1983. v. 23 (6). p. 1195-1198. Includes references. (NAL Call No.: 64.8 C883).

0223

**Effect of boron on the incorporation of glucose from UDP (uridine diphosphate)-glucose into cotton fibers grown in vitro (includes deficiency).**

Dugger, W.M. Palmer, R.L. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. Feb 1980. v. 65 (2). p. 266-273. ill. 51 ref. (NAL Call No.: 450 P692).

0224

**Effect of diflubenzuron on cotton seed viability and vigor.**

Hatzios, K.K. Penner, D. East Lansing, Association of Official Seed Analysts. Journal of seed technology. 1979. v. 4 (1). p. 12-17. 11 ref. (NAL Call No.: SB113.2.J6).

0225

**Effect of methomyl on the concentration of anthocyanin, tannin, and chlorophyll in cotton leaves.**

Parrott, W.L.SENTD. McCarty, J.C. Jr.; Lane, H.C.; Jenkins, J.N.; Hedin, P.A. College Station : Southwestern Entomological Society. The Southwestern entomologist. June 1983. v. 8 (2). p. 94-97. Includes references. (NAL Call No.: QL461.S65).

0226

**The effect of temperature on the chemical composition of hypocotyls of cotton and on the seedling disease incited by *Rhizoctonia solani* / by Richard E. Hunter.**

Hunter, Richard E. (Richard Edmund), 1923. 1968. Thesis (Ph.D.)--Oklahoma State University, 1968. Photocopy. Ann Arbor, Mich. :

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University Microfilms, 1970. viii, 68 leaves : ill. ; 21 cm. Bibliography: leaves 56-59. (NAL Call No.: DISS 69-14,264).

0227

**Effect of 2,4-D (dichlorophenoxyacetic acid) on cotton yield, floral nectar, seed germination, and honeybee visits (*Apis mellifera*).**

Moffett, J.D. Stith, L.S.; Morton, H.L.; Shipman, C.W. Madison, Wis., Crop Science Society of America. Crop science. Nov/Dec 1980. v. 20 (6). p. 747-750. 15 ref. (NAL Call No.: 64.8 C883).

0228

**Effects of some pesticide combinations on cotton growth and disease / by Joseph Earl Elson.**

Elson, Joseph Earl. Ann Arbor, Mich. University Microfilms 1973. Thesis--University of Arizona, 1972. Facsimile produced by microfilm-xerography. xiii, 89 leaves. Bibliography: leaves 80-89. (NAL Call No.: DISS 73-7,803).

0229

**Effects of trifluralin and/or phorate on cotton roots / by Ghanem Saadala Hassawy.**

Hassawy, Ghanem Saadala, 1935. 1970. Thesis (Ph.D.)--University of Arizona, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xv, 134 leaves : ill. ; 21 cm. Bibliography: leaves 128-134. (NAL Call No.: DISS 70-20,677).

0230

**ES191 defoliation of cotton.**

Washington, D.C. Smithsonian Science Information Exchange 1976. Each leaf, "Notice of research project", provides title of project, researcher, performing, and supporting agencies for the project, with brief information on objective, approach, and progress. (19) leaves ; 28 cm. (NAL Call No.: SB608.C8E7).

0231

**Evaluation of cotton polyphenols as factors of resistance of root-knot nematode and fusarium wilt.**

Hedin, P.A. Shepherd, R.L.; Kappelman, A.J. Jr. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. May/June 1984. v. 32 (3). p. 633-638. ill. Includes references. (NAL Call No.: 381 J8223).

0232

**Growth of callus and suspension culture cells from cotton varieties (*Gossypium hirsutum* L.) resistant and susceptible to *Xanthomonas malvacearum* (E. F. SM.) Dows.**

Ruyack, J. Downing, M.R.; Chang, J.S.; Mitchell, E.D. Jr. Rockville, Md., The Association. In vitro; journal of the Tissue Culture Association. Tissue Culture Association. May 1979. v. 15 (5). p. 368-373. ill. 22 ref. (NAL Call No.: QH585.A1I58).

0233

**The influence of *Rhizoctonia solani* Kuhn and of *Meloidogyne incognita* acrita Chitwood on the infection of cotton plants by *Verticillium albo-atrum* Reinke and Berth. / by Farid Yousef Khoury.**

Khoury, Farid Yousef, 1937. 1970. Thesis (Ph.D.)--University of Arizona, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xii, 67 leaves ; 21 cm. Bibliography: leaves 61-67. (NAL Call No.: DISS 70-13,736).

0234

**Isolation and characterization of dimerum acid from *Verticillium dahliae* (Fungal phytopathogen, infection of cotton plants, *Gossypium*, iron physiology).**

Harrington, G.J. Neilands, J.B. New York ; Basel : Marcel Dekker, 1982. Iron nutrition and interactions in plants : Brigham Young University, August 12-14, 1981 / edited by S.D. Nelson ... (et al.). p. 675-682. ill. 17 ref. (NAL Call No.: QK867.J67 v. 5, nos. 4-7).

0235

**Metabolism of O-ethyl O-(4-nitrophenyl) (14C) (carbon isotope) phenylphosphonothioate in cotton and soil (Insecticides).**

Chrzanowski, R.L. Leitch, R.E. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. Jan/Feb 1982. v. 30 (1). p. 155-161. ill. Includes 13 ref. (NAL Call No.: 381 J8223).

0236

**Methods of screening cotton for resistance to *Heliothis* spp. (*Gossypium hirsutum*, includes procedure for determining gossypol content of flower buds).**

Dilday, R.H. SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 26-36. Includes references. (NAL Call No.: 100 G295D).

0237

**Seasonal variation in flowerbud gossypol content in cotton (A substance toxic to several insect pests, cultivars).**

Dilday, R.H. Shaver, T.N. Madison, Wis., Crop Science Society of America. Crop science. Nov/Dec 1981. v. 21 (6). p. 956-960. ill. 12 ref. (NAL Call No.: 64.8 C883).

0238

**Seed viability and aflatoxin production in individual cottonseed naturally contaminated with *Aspergillus flavus*.**

Klich, M.A. JJASD. Lee, L.S. Champaign : The Society. Journal of the American Oil Chemists' Society. Dec 1982. v. 59 (12). p. 545. 5 ref. (NAL Call No.: 307.8 J82).

0239

**Transient charge transfer in living plants undergoing electrostatic spraying (Cotton, leaf wilt, drought stress, pesticides).**

Lane, M.D. TAAEA. Law, S.E. St. Joseph : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1982. v. 25 (5). p. 1148-1153, 1159. ill. 10 ref. (NAL Call No.: 290.9 AM32T).

0240

**Uptake, accumulation, and translocation of arsenical compounds by cotton (Defoliant).**

Marcus-Wyner, L. Rains, D.W. Madison : American Society of Agronomy. Journal of environmental quality. Oct/Dec 1982. v. 11 (4). p. 715-719. 18 ref. (NAL Call No.: QH540.J6).

0241

**Variability in flower-bud gossypol content and agronomic and fiber properties within the primitive race collection of cotton (Breeding stocks tested for resistance to the tobacco budworm, *Heliothis virescens*).**

Dilday, R.H. AR-S0. Shaver, T.N. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1980. v. 20 (1). p. 91-95. ill. 13 ref. (NAL Call No.: 64.8 C883).

# PLANT TAXONOMY AND GEOGRAPHY

0242

An unusual tropical powdery mildew  
(*Brasiliomyces malachrae*, description,  
comparison with other powdery mildews, parasite  
of cultivated and wild cottons, *Gossypium*  
*barbadense*, *Gossypium hisutum* and *Gossypium*  
*puppurascens*).

Hanlin, R.T. Tortolero, O. Bronx, N.Y. : The  
New York Botanical Garden. *Mycologia*. May/June  
1984. v. 76 (3). p. 439-442. ill. Includes  
references. (NAL Call No.: 450 M99).

# PROTECTION OF PLANTS

0243

**Basic principals and practical considerations for ground applications (Pesticides, cottonseed oil).**

Moore, J.D. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 39-40. Includes references. (NAL Call No.: 72.9 C8292).

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**Cotton cultivar response to propazine and atrazine (Phytotoxicity).**

Abernathy, J.R. Keeling, J.W. Madison, Wis., American Society of Agronomy. Agronomy journal. Nov/Dec 1979. v. 71 (6). p. 929-931. ill. 8 ref. (NAL Call No.: 4 AM34P).

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Ridgway, R.L. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 75. Includes references. (NAL Call No.: 72.9 C8292).

0246

**Cotton seed treatment control of seedling diseases, 1979 (Cotton (Gossypium hirsutum), seedling diseases).**

Blackman, C.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 178. (NAL Call No.: 464.9 AM31R).

0247

**Economic impact of integrated pest management strategies for cotton production in the Coastal Bend Region of Texas.**

Masud, S.M. Lacewell, R.D.; Taylor, C.R.; Benedict, J.H.; Lippke, L.A. Gainesville, Fla., Southern Agricultural Economics Assoc. Extract: This study examines the value and economic impact of short-season cotton production system under IPM strategies as it relates to yield and producer returns in the Coastal Bend Region of Texas. The study has implications for cotton producers, industry leaders, and other professionals for a better understanding of the economics of cotton production and for analyzing possible future production decisions relating to cotton. Southern journal of agricultural economics. Dec 1981. v. 13 (2). p. 47-52. 11 ref. (NAL Call No.: HD101.S6).

0248

**Effect of oryzalin and 1,1-dimethylpiperidinium chloride on cotton and tomato roots infected with the root-knot nematode, Meloidogyne incognita.**

Drum, T.V. Bartels, P.G. Ames, Iowa Society of Nematologists. Journal of nematology. Jan 1979. v. 11 (1). p. 78-83. ill. 16 ref. (NAL Call No.: QL391.N4J62).

0249

**Effects of fumigating crops with hydrogen sulfide or sulfur dioxide (Injuries, lettuce, sugarbeets, cotton, alfalfa).**

Thompson, C.R. Kats, G. Berkeley, Division of Agricultural Sciences, University of California. California agriculture. Mar 1979. v. 33 (3). p. 9-10. ill. (NAL Call No.: 100 C12CAG).

0250

**The effects of ozone on the growth, yield, and partitioning of dry matter in cotton.**

Oshima, R.U. Braegelmann, P.K. Madison, Wis., American Society of Agronomy. Journal of environmental quality. Oct/Dec 1979. v. 8 (4). p. 474-479. ill. 24 ref. (NAL Call No.: QH540.J6).

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**Effects of premature defoliation and plant kill on germination of cottonseed (on the High Plains of Texas).**

Minton, E.B. Wanjura, D.F. Bilbro, J.D. Madison. Agronomy journal American Society of Agronomy. July/Aug 1979. v. 71 (4). p. 659-661. ill. 16 ref. (NAL Call No.: 4 AM34P).

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**Effects of premature plant kill and hand defoliation on cotton performance.**

Bilbro, J.D. Wanjura, D.F. College Station, Tex., The Station. MP.Texas. Agricultural Experiment Station. Oct 1979. Oct 1979. (1436). 6 p. ill. 8 ref. (NAL Call No.: 100 T31M).

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**Effects of soil fumigation with 1,3-dichloropropene and 1,3-dibromo-3-chloropropane (nematicides) on yields of cotton, lima beans and tomatoes.**

Turner, G.D. Midland, Dow Chemical Company. Down to earth. Summer 1979. v. 35 (3). p. 4-8. ill. 6 ref. (NAL Call No.: 381 D75).

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**Efficacy and rotational crop response to levels and dates of dinitroaniline herbicide applications (Cotton injury, weed control, persistence).**

Abernathy, J.R. Keeling, J.W. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 312-317. ill. 9 ref. (NAL Call No.: 79.8 W41).

0255

**Electrostatic deposition of pesticide spray onto foliar targets of varying morphology (Broccoli, maize, cotton, cabbage).**

Law, S.E. Lane, M.D. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1441-1445, 1448. ill. 10 ref. (NAL Call No.: 290.9 AM32T).

0256

**Excess trace metal effects on cotton. 1. Copper, zinc, cobalt and manganese in solution culture (Phytotoxicity).**

Rehab, F.I. Wallace, A. New York, Dekker. Communications in soil science and plant analysis. 1978. v. 9 (6). p. 507-518. ill. 14 ref. (NAL Call No.: S590.C63).

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**Excess trace metal effects on cotton. 2. Copper, zinc, cobalt and manganese in Yolo loam soil (Phytotoxicity).**

Rehab, F.I. Wallace, A. New York, Dekker. Communications in soil science and plant analysis. 1978. v. 9 (6). p. 519-527. ill. 21 ref. (NAL Call No.: S590.C63).

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**Excess trace metal effects on cotton. 3. Chromium and lithium in solution culture (Phytotoxicity).**

Rehab, F.I. Wallace, A. New York, Dekker. Communications in soil science and plant analysis. 1978. v. 9 (7). p. 637-644. ill. 13 ref. (NAL Call No.: S590.C63).

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**Excess trace metal effects on cotton. 4. Chromium and lithium in Yolo loam soil (Phytotoxicity).**

Rehab, F.I. Wallace, A. New York, Dekker. Communications in soil science and plant analysis. 1978. v. 9 (7). p. 645-651. ill. 17 ref. (NAL Call No.: S590.C63).

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**Excess trace metal effects (phytotoxicity) on cotton. 5. Nickel and cadmium in solution culture.**

Rehab, F.I. Wallace, A. New York, Marcel Dekker. Communications in soil science and plant analysis. 1978. v. 9 (8). p. 771-778. ill. 11 ref. (NAL Call No.: S590.C63).

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**Excess trace metal effects (phytotoxicity) on cotton. 6. Nickel and cadmium in Yolo loam soil.**

Rehab, F.I. Wallace, A. New York, Marcel Dekker. Communications in soil science and plant analysis. 1978. v. 9 (8). p. 779-784. ill. 11 ref. (NAL Call No.: S590.C63).

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**Factors delaying maturity and limiting cotton yields in Alabama (Date of planting, nitrogen rates, pesticide damage).**

Gaylor, M.J. Buchanan, G.A. Auburn, The Station. Highlights of agricultural research. Alabama. Agricultural Experiment Station. Summer 1979. v. 26 (2). p. 3. ill. (NAL Call No.: 100 AL1H).

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**The farm pesticide industry.**

Eichers, T.R. Washington, D.C., The Department. Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AG8A).

0264

**Granular nematicides as adjuncts to fumigants for control of cotton root-knot nematodes (Meloidogyne incognita).**

Jorgenson, E.C. Ames, Iowa, Society of Nematologists. Journal of nematology. Apr 1979. v. 11 (2). p. 144-150. ill. 10 ref. (NAL Call No.: QL391.N4J62).

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**Growth and development of the cotton plant in Arizona / Robert E. Dennis, Robert E. Briggs.** Dennis, Robert E. Briggs, Robert E. Tucson University of Arizona, Cooperative Extension Service (1981?). Caption title ~Pesticide Applicator Training collection ~"8168.". 7, (1) p. : ill. ; 28 cm. Bibliography: p. (8). (NAL Call No.: SB249.D46).

0266

**Growth inhibition of cotton (*Gossypium hirsutum*) and soybean (*Glycine max*) roots and shoots by three dinitroaniline herbicides (Phytotoxicity).** Murray, D.S. Street, J.E. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 336-342. ill. 8 ref. (NAL Call No.: 79.8 W41).

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**Histochemical localization and nematoxicity of terpenoid aldehydes in cotton (Root-knot nematode, *Meloidogyne incognita*).** Veech, J.A. Ames, Iowa, Society of Nematologists. Journal of nematology. July 1979. v. 11 (3). p. 240-246. ill., plate. 21 ref. (NAL Call No.: QL391.N4J62).

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**Increase of cold tolerance in cotton plant (*Gossypium Hirsutum* L.) by mepiquat chloride / principal investigators S.Y. Huang ... (et al.).** Huang, S. Y. Houston, Tex. Lyndon B. Johnson Space Center, NASA Springfield, Va. for sale by National Technical Information Service 1982. AgRISTARS (Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing) is a joint program of the U.S. Dept. of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the Agency for International Development, and the U.S. Dept. of the Interior ~U.S. Dept. of Agriculture, Agricultural Research Service, Soil and Water Conservation Research ~"February 1982. ~Early warning and crop condition assessment EW-U2-04243. 8 leaves : ill. ; 28 cm. -. Includes bibliographical references. (NAL Call No.: SB249.I57).

0270

**Influence of site of uptake of fluridone (herbicide) on early development of soybean (*Glycine max*) and cotton (*Gossypium hirsutum*) (Injuries).** Rafii, Z.E. Ashton, F.M. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 321-327. ill. 9 ref. (NAL Call No.: 79.8 W41).

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**Interaction of population levels of *Fusarium oxysporum* f. sp. *vasinfectum* and (the root-knot nematode) *Meloidogyne incognita* on cotton (Integrated pest management).** Garber, R.H. Jorgenson, E.C. Ames, Iowa, Society of Nematologists. Journal of nematology. Apr 1979. v. 11 (2). p. 133-137. ill. 14 ref. (NAL Call No.: QL391.N4J62).

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**The MAR (Multi-Adversity Resistance) system for genetic improvement of cotton.** Bird, L.S. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1982. v. 66 (2). p. 172-176. ill. Includes 13 ref. (NAL Call No.: 1.9 P69P).

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**Metabolic sites of action of fluridone (herbicide) in isolated mesophyll cells (kidney beans, cotton uptake, inhibition).** Rafii, Z.E. Ashton, F.M. Champaign, Ill., Weed Science Society of America. Weed science. July 1979. v. 27 (2). p. 422-426. ill. 13 ref. (NAL Call No.: 79.8 W41).

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**Nematode control (in cotton): an overview covering plant resistance, chemical and rotational approaches.** Heald, C.M. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. 1979. p. 20-21. (NAL Call No.: SB249.N6).

0275

**Population development and effects of the spiral nematode, *Helicotylenchus dihystera*, on cotton in microplots.** Bernard, E.C. Hussey, R.S. Beltsville, Md., The Administration. Plant disease reporter. United States. Dept. of Agriculture. Science and Education Administration. Oct 1979. v. 63 (10). p. 807-810. ill. 11 ref. (NAL Call No.: 1.9 P69P).

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**A quantitative technique for evaluating cotton for root-knot nematode resistance (*Meloidogyne incognita acritia*, breeding for resistance).**  
Shepherd, R.L. St. Paul, American Phytopathological Society. *Phytopathology*. Apr 1979. v. 69 (4). p. 427-430. ill. 20 ref. (NAL Call No.: 464.8 P56).

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**Registration of HYC79-6 cotton germplasm (Breeding for disease and pest resistance).**  
Sappenfield, W.P. Madison, Wis. : Crop Science Society of America. *Crop science*. July/Aug 1984. v. 24 (4). p. 829. Includes references. (NAL Call No.: 64.8 C883).

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**Response of cotton (*Gossypium hirsutum*) to (herbicide) dicamba (Phytotoxicity).**  
Hamilton, K.C. Arle, H.F. Champaign, Ill., Weed Science Society of America. *Weed science*. Nov 1979. v. 27 (6). p. 604-607. 11 ref. (NAL Call No.: 79.8 W41).

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**Scutellonema brachyurum: host plants and pathogenicity on cotton (Nematodes).**  
Kraus, H. Lewis, S.A. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. *Plant disease reporter*. Aug 1979. v. 63 (8). p. 688-691. ill. 14 ref. (NAL Call No.: 1.9 P69P).

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**Seasonal fluctuations of various nematode populations in cotton fields in South Carolina (*Hoplolaimus columbus*, *Meloidogyne incognita*, *Scutellonema brachyurum*).**  
Kraus-Schmidt, H. Lewis, S.A. Beltsville, Md., The Administration. *Plant disease reporter*. United States. Dept. of Agriculture. Science and Education Administration. Oct 1979. v. 63 (10). p. 859-863. ill. 11 ref. (NAL Call No.: 1.9 P69P).

0281

**The shedding of 4-lock and 5-lock bolls in upland cotton by R.E. Beckett and J.W. Hubbard.**  
Beckett, R. E. Washington, D.C. U.S. Dept. of Agriculture 1932. 16 p. : ill. -. Includes bibliographical references. (NAL Call No.: Fiche S-69 no.277).

0282

**Tamcot CAMD-E, a multi-adversity resistant cotton variety (Breeding for disease resistance).**  
Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1720). 6 p. ill. (NAL Call No.: 275.29 T313).

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**Tamcot SP21S, a multi-adversity resistant cotton variety (Breeding for disease resistance).**  
Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1721). 6 p. ill. (NAL Call No.: 275.29 T313).

0284

**Tamcot SP37H, a multi-adversity resistant cotton variety (Breeding for disease resistance).**  
Bird, L.S. College Station, Tex., The Station. Leaflet L.Texas. Agricultural Experiment Station. Dec 1978. Dec 1978. (1672). 6 p. ill. (NAL Call No.: 275.29 T313).



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0285

(NAL Call No.: S544.3.N6N62).

**Basal application of systemic insecticides to cotton plants / Beverly Gray Reeves.**  
Reeves, Beverly Gray. 1965. Thesis (M.S.)--Texas A&M University, 1965. Extension Repository Collection ~Typescript (photocopy)--Cover title. viii, 59 leaves : ill. ; 28 cm. Bibliography: leaves 48-49. (NAL Call No.: SB951.5.R42).

0286

**Compendium of cotton diseases / G.M. Watkins, editor ; manuscript prepared by the Cotton Disease Council.**  
Watkins, G. M. St. Paul, Minn. (3340 Pilot Knob Road) American Phytopathological Society 1981. Includes bibliographies and index. vii, 87 p. : ill. (some col.) ; 28 cm. (NAL Call No.: SB608.C8C65).

0287

**Evaluation of pest management programs for cotton, peanuts and tobacco in the United States / by Rosmarie von Rumker ... (et al.) ; for Council on Environmental Quality.**  
Von Rumker, Rosmarie. (Washington, D.C.?) Office of Pesticide Programs, Office of Water and Hazardous Materials, Environmental Protection Agency 1975. v, 108 p. : maps ; 28 cm. Bibliography: p. 105-108. (NAL Call No.: MLCM 83/1008).

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**The optimum pest management program for cotton in Panola and Pontotoc counties, 1979 : a preliminary report / by Eugene H. Simpson, III, Trudy Dawkins, David W. Parvin, Jr.**  
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**Pesticide applicator certification.**  
(United States? s.n.) 1982. Pesticide Applicator Training Collection ~Title from container ~Beta format. 4 videocassettes (ca. 60 min. each) : sd., col. ; 1/2 in. (NAL Call No.: Videocassette no.5).

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York, A. NC. Raleigh, N.C., The Service. AG - North Carolina Agricultural Extension Service, North Carolina State University. North Carolina State University. Agricultural Extension Service. Feb 1980. Feb 1980. (202). 4 p. ill.

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**Absorption and metabolism of permethrin and cypermethrin in the cockroach (*Periplaneta americana*) and the cotton-leafworm larvae (*Spodoptera littoralis*).**  
Holden, J.S. Oxford, Blackwell. Pesticide science. Aug 1979. v. 10 (4). p. 295-307. ill. 30 ref. (NAL Call No.: SB951.P47).

0292

**Activation of an O-ethyl S-n-propyl phosphorothiolate, TIA-230, in the central nerve of *Spodoptera* larvae (Insecticides, cotton pests).**  
Kono, Y.PCBPB. Sato, Y.; Okada, Y. New York : Academic Press. Pesticide biochemistry and physiology. Oct 1983. v. 20 (2). p. 225-231. ill. Includes references. (NAL Call No.: SB951.P49).

0293

**Activity of insecticides on eggs of *Heliothis* on cotton, 1978 (*Heliothis zea*, *Heliothis virescens*).**  
Drake, D.C. Searcy, J.W.; Potharst, K.; Fort, T.M.; Welch, A.W. Jr. College Park : Entomological Society of America. Insecticide and acaricide tests. 1982. v. 7. p. 156-157. (NAL Call No.: SB950.A1I49).

0294

**Actuator system for operating small ball valves (Mechanical equipment used to make food pellets for boll weevils, *Anthonomus grandis*, cotton).**  
Griffin, J.G. New Orleans, La., The Region. Advances in agricultural technology. AAT-S - United States, Dept. of Agriculture, Science and Education Administration, Agricultural Research, Southern Region. Jan 1979. Jan 1979. (2). 4 p. ill. 1 ref. (NAL Call No.: aS21.A75U7).

0295

**Adult *Eucelatoria* sp.: response to volatiles from cotton and okra plants and from larvae of *Heliothis virescens*, *Spodoptera eridania*, and *Estigmene acrea*.**  
Nettles, W.C. Jr. College Park, Md., Entomological Society of America. Environmental entomology. Dec 1980. v. 9 (6). p. 759-763. 18 ref. (NAL Call No.: QL461.E532).

0296

**Aerial release of *Trichogramma pretiosum* for (biological) control of *Heliothis* on cotton.**  
Luttrell, R.G. Crawford, M.; Yearian, W.C.; Young, S.Y.; Mueller, A.J. Fayetteville, Ark., The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Nov/Dec 1980. v. 29 (6). p. 13. ill. (NAL Call No.: 100 AR42F).

0297

**Aerial spray experiment for control of cotton (insect) pests.**  
Sidhu, A.S. Dhawn, A.K. Bombay, Colour Publications. Pesticides. Nov 1978. v. 12 (11). p. 25-26, 28. ill. 2 ref. (NAL Call No.: SB951.P43).

0298

**Allozyme variation in natural populations of *Heliothis virescens* (Pest of cotton and tobacco, North Carolina, California).**  
Sluss, T.P. Graham, H.M. College Park, Md. Annals Entomological Society of America. Mar 15, 1979. v. 72 (2). p. 317-322. ill., map. 21 ref. (NAL Call No.: 420 EN82).

0299

**Ambush insecticide labeled for boll weevil control (*Anthonomus grandis*, on cotton).**  
Santa Fe Springs, Calif., Ned K. Rosenblatt. Aerial applicator. July 1980. v. 18 (6). p. 10. (NAL Call No.: 333.8 AE8).

0300

**AMMO (TM)--a new cotton insecticide (*Heliothis*).**  
Knabke, J.J. Memphis, Tenn., National Cotton Council of America. Summary proceedings of the ... Beltwide Cotton Production Mechanization Conference. 1982. 1982. p. 104-106. (NAL Call No.: 72.9 C8292).

0301

**Analysis of volatiles from host (American-Egyptian cotton, upland cotton) and nonhost (okra, hollyhock, kenaf, alfalfa) plants of the pink bollworm (*Pectinophora gossypiella*).**  
Pomonis, J.G.+ Flint, H.M. Smith, R.L. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1980. v. 73 (6). p. 783-786. 22 ref. (NAL Call No.: 421 J822).

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**Anatomy and histology of the mature larva of the American cotton leafworm, *Alabama argillacea* (Hubner, 1818) (Lepidoptera, Noctuidae).**  
Habib, M.E.M. (s.l.), A Sociedade. Anais.Sociedade Entomologica do Brasil. 1978. v. 7 (1). p. 7-14. ill. 20 ref. (NAL Call No.: QL461.S64).

0303

**Annual conference on cotton insect research and control, 1947-1982.**  
Parencia, C.R. Jr.SENTD. Lincoln, C. College Station : Southwestern Entomological Society. The Southwestern entomologist. Dec 1983. v. 8 (4). p. 303-314. (NAL Call No.: QL461.S65).

0304

**Antagonistic effects of two synthetic sex pheromones on catches of the cotton pests *Pectinophora gossypiella* and *Spodoptera littoralis*.**  
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**Anti-feedant for boll weevils / Martin Jacobson.**  
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0306

**Anti-feedant for boll weevils (*Anthonomus grandis*, cotton plants, *Gossypium*, methyl ester of alpha-eleostearic acid, saponification of tung oil; citation only).**  
Jacobson, M. Washington, D.C. : The Office. United States patent - United States Patent Office. Oct 6, 1981. Copies of USDA patents are available for a fee from the Commissioner of Patents and Trademarks, U.S. Patents and Trademarks Office, Washington, D.C. 20231. Oct 6, 1981. (4,293,567). 3 p. Includes references. (NAL Call No.: NO CALL NO. (PAT)).

0307

**Antifertility effects of compounds screened against the boll weevil, *Anthonomus grandis* Boheman (Cotton).**  
Haynes, J.W. Wright, J.E. Mississippi State. Technical bulletinMississippi. Agricultural and Forestry Experiment Station. Jan 1979. Jan 1979. (96). 7 p. ill. 15 ref. (NAL Call No.: S79.EB).

0308

**Antixenosis of smooth leaf cotton to the ovipositional response of tobacco budworm (*Heliothis virescens*).**  
Robinson, S.H. AR-50. Wolfenbarger, D.A.; Dilday, R.H. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1980. v. 20 (5). p. 646-649. ill. 5 ref. (NAL Call No.: 64.8 C883).

0309

**Apparatus for simultaneous determination of locomotor activity in multiple treatments of boll weevils (*Anthonomus grandis grandis*, cotton).**  
Moore, R.F. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1980. v. 73 (6). p. 795-797. ill. 5 ref. (NAL Call No.: 421 J822).

0310

**Application of a computer model to simulate effects of chemical termination of late-season cotton fruiting on diapause pink bollworm (*Pectinophora gossypiella*) populations.**  
Henneberry, T.J. Kittock, D.L. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Sept 1979. v. 4 (3). p. 231-234. ill. 8 ref. (NAL Call No.: QL461.S65).

0311

**Approach to the evaluation of some factors affecting insect resistance in one 'Acala' and seven sister genotypes of Stoneville cotton in New Mexico.**  
Ellington,J. Cardenas, M.; Kiser, K.; Guerra, L.; Salguero, V.; Ferguson, G. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 612-618. Includes references. (NAL Call No.: 421 J822).

(PESTS OF PLANTS - INSECTS)

- 0312  
Aquatic hazard assessment--a case history for a cotton insecticide (Abstract only).  
McCarthy, J.F. Boulder, Colo. : U.S. Dept. of Commerce, NOAA, 1982. Proceedings of the Workshop on Agrichemicals and Estuarine Productivity, Duke University Marine Laboratory, Beaufort, North Carolina, September 18-19, 1980. p. 293-294. (NAL Call No.: GC97.W6 1980).
- 0313  
Arizona cotton farmers positive about new mandatory assessment (to increase funding for boll weevil research and abatement procedures, *Anthonomus grandis*, Senate Bill 1295, Arizona Cotton Growers Association).  
Phoenix, Ariz. : Elliott L. Cushman. Arizona farmer rancher. Aug 1984. v. 63 (8). p. 6, 30. ill. (NAL Call No.: 6 AR44).
- 0314  
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Tucson, Ariz. : College of Agriculture, University of Arizona. Arizona land & people. Mar 1984. v. 35 (1). p. 18-20. (NAL Call No.: 6 P9452).
- 0315  
Arthropod predators on cotton, corn, tobacco, and soybeans in South Carolina.  
Roach, S.H. AR-50. Athens, Ga., The Society. Journal - Georgia Entomological Society. Georgia Entomological Society. Apr 1980. v. 15 (2). p. 131-138. ill. 8 ref. (NAL Call No.: QL461.G4).
- 0316  
Association of cotton nectar production with *Heliothis punctigera* (Lepidoptera: Noctuidae) oviposition.  
Adjei-Mafo, I.K. EVETB. Wilson, L.T. College Park : Entomological Society of America. Environmental entomology. Aug 1983. v. 12 (4). p. 1166-1170. Includes references. (NAL Call No.: QL461.E532).
- 0317  
The association of the mite, *Siteroptes reniformis* and *Nigrospora oryzae* in *Nigrospora* lint rot of cotton bolls.  
Laemmlen, Franklin Ford, 1938. Ann Arbor, Mich. University Microfilms 1971. Thesis--University of California at Davis, 1970. iii, 51 leaves. Bibliography: leaves 48-51. (NAL Call No.: DISS 71-7,941).
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Beltwide boll weevil/cotton insect management programs: appendix B - economic evaluation. United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service. Extract: Alternative boll weevil/cotton insect management programs were evaluated for their effects on net market benefits and for their distributive impacts on producers and consumers. The Optimum Pest Management with No Incentives and Boll Weevil Eradication (OPM-NI-BWE) program produced the highest net market benefits, as measured by the sum of producer and consumer benefits less public program costs. Consumer benefits from lower prices greatly exceeded the loss of producer incomes and public costs. The Optimum Pest Management with No Incentive (OPM-NI) program produced the highest rate of return on Federal investment. A B/C ratio of 44:1 was obtained, compared with 17:1 for OPM-NI-BWE. ERS staff report - United States Dept. of Agriculture, Economic Research Service. June 5, 1981. Available from NTIS - order no. PB82-156-209. June 5, 1981. (AGESS810518). 68 p. maps. 20 ref. (NAL Call No.: 916762(AGE)).

0322

**Beltwide boll weevil/cotton insect management programs: appendix D - program definitions and public costs.**

United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.

Extract: Implementation plans were outlined and respective public costs were estimated for six beltwide boll weevil/cotton insect management programs in boll weevil-infested areas. Public cost is only one component of an economic evaluation of alternative programs. If fully implemented, annual public costs of the programs would be: current insect control (CIC), ~ .5 million; optimum pest management with incentives (OPM-I), \$36 million; OPM with phased incentives (OPM-PI), \$7 million; OPM with no incentives (OPM-NI) \$7 million; OPM-NI with boll weevil eradication (OPM-NI-BWE), \$7.5 million; and CIC-BWE, \$3 million. However, estimated public and private costs would total \$460 million during the 9 years to eradicate the boll weevil. Also, public costs for diapause treatments for the OPM program with phased incentives would total about \$61 million during the 3 years of implementation. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1981. Available from NTIS. May 1981. (AGESS810504). 190 p. (NAL Call No.: 916762(AGE)).

0323

**Beltwide boll weevil/cotton insect management programs: appendix E - the Delphi: insecticide use and lint yields.**

United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service. The Delphi, a method for systematic collection of information from experts, was modified to obtain biological data required for the economic analysis of boll weevil/cotton insect management programs. Cotton insect management and crop production experts provided detailed data regarding the insecticide use patterns and cotton lint yields they projected would result under each of five alternative insect management options, in 35 subregions of cotton production. These data were used to estimate average insecticide use and cotton lint yield of six boll weevil/cotton insect management programs. Producers' average insect control costs under each program also were calculated from the information provided by the Delphi experts. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 1981. Available from NTIS. May 1981. (AGESS810507). 123 p. (NAL Call No.: 916762(AGE)).

0324

**Beltwide boll weevil/cotton insect management programs: overall evaluation.**

United States ~ Dept. of Agriculture ~ Economic Research Service ~ Natural Resource Economics Division. Washington, D.C., The Service.

Extract: Two boll weevil/cotton insect management trials, conducted during 1978-80, demonstrated the technical and operational feasibility of eradicating a boll weevil population from a geographic area or eliminating the need for boll weevil treatments during the cotton-growing season. Six cotton insect management programs were specified and evaluated for application in the boll weevil infested areas of the Cotton Belt. The Optimum Pest Management with No Incentive and Boll Weevil Eradication (OPM-NI-BWE) Program would yield substantially higher total economic and environmental benefits than the other programs. The OPM with No Incentive Program was estimated to yield the highest benefit/cost ratio in terms of public expenditures. ERS staff report - United States Dept. of Agriculture, Economic Research Service. May 15, 1981. Available from NTIS. May 15, 1981. (AGESS810721). 45 p. 16 ref. (NAL Call No.: 916762(AGE)).

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**Boll weevil: movement into an uninfested area and detection with grandlure-baited traps (Anthonomus grandis grandis, cotton pest, South Carolina).**

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**Boll weevil still threat to state, but farmers are gaining more ground (Anthonomus grandis, Arizona cotton).**

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0383

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Wilson, F.D. George, B.W. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1980. v. 20 (5). p. 563-566. 15 ref. (NAL Call No.: 64.8 C883).

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Dean, P. SEA-WO-AR-W. Washington, D.C., The Administration. Agricultural research - U.S. Department of Agriculture, Science and Education Administration. Aug 1980. v. 29 (2). p. 15. ill. (NAL Call No.: 1.98 AG84).

0386

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Nuessly, G.S. Sterling, W.L. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Mar 1984. v. 9 (1). p. 95-103. Includes references. (NAL Call No.: QL461.S65).

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0395

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**Comparison of toxicity of insecticides to larvae of a laboratory strain of fall armyworm (*Spodoptera frugiperda*) to those collected from cotton and corn in central Mississippi.**

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0400

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0401

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Lopez, J.D. Jr. AR-SO. College Park, Md., Entomological Society of America. Journal of economic entomology. Apr 1980. v. 73 (2). p. 324-326. ill. 18 ref. (NAL Call No.: 421 J822).

0402

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Brown, L.G. McClendon, R.W. St. Joseph, Mich., The Society. Transactions of the ASAE American Society of Agricultural Engineers. July/Aug 1979. v. 22 (4). p. 771-774. ill. 11 ref. (NAL Call No.: 290.9 AM32T).

0404

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Dean, P. Washington, D.C., The Administration. Agricultural research - U.S. Department of Agriculture, Science and Education Administration. July/Aug 1982. v. 31 (1/2). p. 4-5. ill. (NAL Call No.: 1.98 AG84).

0405

**Conjugation: the major metabolic pathway of <sup>14</sup>C (carbon isotope)-diflubenzuron in the boll weevil (*Anthonomus grandis grandis*, pest of cotton).**

Chang, S.C. Stokes, J.B. Baltimore, Entomological Society of America. Journal of economic entomology. Feb 15, 1979. v. 72 (1). p. 15-19. ill. 10 ref. (NAL Call No.: 421 J822).

0406

**Constituents (volatile compounds) of mustard, goldenrod, and croton--three host plants of the tarnished plant bug (*Lygus lineolaris*, pest of cotton).**

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0407

**Control cotton bollworms and tobacco budworms (*Heliothis zea*, *Heliothis virescens*, includes microbial insecticides).**

Head, B. Starkville, Miss., The Service. Information sheet - Mississippi State University, Cooperative Extension Service. Dec 1981. Dec 1981. (1198). 2 p. ill. (NAL Call No.: S544.3.M7M5).

0408

**Control of cotton bollworm and tobacco budworm in cotton, 1981 (*Heliothis* spp.).**

Conley, J. Luttrell, R.G. College Park : Entomological Society of America. Insecticide and acaricide tests. 1982. v. 7. p. 154-155. (NAL Call No.: SB950.A1I49).

0409

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Newsome, L. Solomon, J.D. College Park : Entomological Society of America. Insecticide and acaricide tests. 1980. v. 5. p. 187. (NAL Call No.: SB950.A1I49).

0410

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0411

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0412

**Controlling boll weevils with trap cropping, resistant cotton (Louisiana).**

Burris, E.LOAGA. Clower, D.F.; Jones, J.E.; Anthony, S.L. Baton Rouge : The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Spring 1983. v. 26 (3). p. 22-24. ill. (NAL Call No.: 100 L939).

0413

**Controlling cotton's insect pests: a new system (New short-season cotton varieties and traditional cultural practices).**

Adkisson, P.L. Niles, G.A.; Walker, J.K.; Bird, L.S.; Scott, H.B. Washington, D.C., American Association for the Advancement of Science. Science. Apr 2, 1982. v. 216 (4541). p. 19-22. Includes 20 ref. (NAL Call No.: 470 SCI2).

0414

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0415

**Controlling Heliothis spp. on cotton through the release of Trichogramma pretiosum and applications of Bacillus thuringiensis - an economic assessment (integrated pest management).**

Liapis, P.S. Washington, D.C., The Service. Extract: This study examines the cost effectiveness of employing biological controls to control Heliothis spp. on cotton in the Delta Area of Mississippi. The biological controls examined are: a) the release of Trichogramma, an egg parasitoid, b) the use of Bacillus thuringiensis, a bacterial agent, and c) the joint use of Bacillus thuringiensis and Trichogramma. The cost of employing the biological agents are compared to the cost of employing conventional material, and break-even yields are determined. Partial budget analysis indicates that the cost of utilizing Trichogramma or Bacillus thuringiensis as the control agent may be cost competitive. Further research is needed to determine the yield effects of the biological controls examined in this study before use recommendations can be made. ESCS staff report - U.S. Dept. of Agriculture, Economics, Statistics, and Cooperatives Service. Aug 1980. Aug 1980. 36 p. 27 ref. (NAL Call No.: 916762(AGE)).

0416

**Controlling plant bugs (Lygus, cotton pest): in the irrigated west.**

Leigh, T.F. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. 1979. p. 47-48. (NAL Call No.: SB249.N6).

0417

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Tugwell, N.P. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. 1979. p. 48-50. ill. (NAL Call No.: SB249.N6).

0418

**Coping with the tobacco budworm/bollworm (Heliothis virescens/Heliothis zea) problem: Cotton Incorporated's research program.**

Darst, P.H. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. 1979. p. 42-43. (NAL Call No.: SB249.N6).

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0419

## **The cost of insecticides used on cotton in the United States.**

Cooke, F.T. Jr.XAAHA. Parvin, D.W. Jr. Washington : The Department. Agriculture handbook - United States Department of Agriculture. Nov 1983. Nov 1983. (589). p. 29-52. maps. Includes references. (NAL Call No.: 1 AG84AH).

0420

## **Cotton allelochemicals and growth of tobacco budworm larvae (Plant resistance, genetics, *Heliothis virescens*).**

Jenkins, J.N.CRPSAY. Hedin, P.A.; Parrott, W.L.; McCarty, J.C. Jr.; White, W.H. Madison : Crop Science Society of America. Crop science. Nov/Dec 1983. v. 23 (6). p. 1195-1198. Includes references. (NAL Call No.: 64.8 C883).

0421

## **Cotton and Insect Management simulation model (CIM model, *Anthonomus grandis*, *Heliothis* spp.).**

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0422

## **Cotton ball period response to water stress and pink bollworm (*Gossypium hirsutum*, *Pectinophora gossypiella*, early irrigation termination, Arizona).**

Kittock, D.L.AGJDA. Henneberry, T.J.; Bariola, L.A.; Taylor, B.B.; Hofmann, W.C. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1983. v. 75 (1). p. 17-20. ill. 17 ref. (NAL Call No.: 4 AM34P).

0423

## **Cotton boll weevil : an evaluation of USDA programs / a report prepared by the Committee on Cotton Insect Management, Board on Agriculture and Renewable Resources, Commission on Natural Resources, National Research Council.**

Washington, D.C. National Academy Press 1981. Study supported by the U.S. Dept. of Agriculture ~"PB82-105545.". xvi, 130 p. : ill. ; 28 cm. Bibliography: p. 120-130. (NAL Call No.: SB945.C8C6).

0424

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Gard, I.E. Hunkapiller, P. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 93-95. ill. (NAL Call No.: 72.9 C8292).

0425

## **Cotton boll weevil program: USDA's response to the National Research Council evaluation.**

Mussman, H. C. Memphis, Tenn., National Cotton Council of America. Summary proceedings of the ... Beltwide Cotton Production Mechanization Conference. 1982. 1982. p. 91-93. (NAL Call No.: 72.9 C8292).

0426

## **Cotton bollweevil survival and emergence in hibernation cages in Louisiana by R.C. Gaines.**

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0427

## **Cotton bud drying: contributions to boll weevil mortality (*Anthonomus grandis*, *Gossypium hirsutum*, models).**

Curry, G.L. Cate, J.R.; Sharpe, P.J.H. College Park, Md., Entomological Society of America. Environmental entomology. Apr 15, 1982. v. 11 (2). p. 344-350. ill. Includes ref. (NAL Call No.: QL461.E532).

0428

## **Cotton cultivars resistant to the pink bollworm (*Pectinophora gossypiella*).**

Wilson, F.D. AR-W-AR-W. Washington, D.C., The Region. Agricultural reviews and manuals. ARM-W - United States, Dept. of Agriculture, Science and Education Administration, Western Region. June 1980. June 1980. (16). p. 46-51. 13 ref. (NAL Call No.: aS21.A75U64).

0429

## **Cotton ecosystem diversification and plant bug trapping with interplanted alfalfa in Delta of Mississippi.**

Schuster, M.F. MS-CR. Mississippi State, The Station. Technical bulletin - Mississippi. Agricultural and Forestry Experiment Station. Mar 1980. Mar 1980. (98). 16 p. (NAL Call No.: S79.E8).

0430

**Cotton growers battle pests (in Dallas County, Alabama).**

Carrol, S. SEA. Washington, D.C., The Administration. Extension review - United States Department of Agriculture, Science and Education Administration. Summer 1980. v. 51 (3). p. 28-29. ill. (NAL Call No.: 1 EX892EX).

0431

**Cotton incorporated's pest and worm research programs (Heliothis, biological control).**

Darst, P.H. Memphis (etc.), Southwest Five-State Cotton Growers Association. Summary proceedings - Western Cotton Production Conference Western Cotton Production Conference. 1979. 1979. p. 36-38. (NAL Call No.: 72.8 W522).

0432

**Cotton insect biocontrol takes a big step forward (Trichogramma, Heliothis, biological control agent).**

Nettles, W.C. Jr. AGREA. Washington, D.C. : The Administration. Agricultural research - U.S. Department of Agriculture, Agricultural Research Service. May 1983. v. 31 (11). p. 7. ill. (NAL Call No.: 1.98 AG84).

0433

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Lambert, W.R. Herzog, G.A. Athens. Circular Georgia. University. Cooperative Extension Service. Mar 1979. Mar 1979. (501). 12 p. ill. (NAL Call No.: 275.29 G29C).

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Pinkston, K. Young, J.; Cleveland, E.; Price, R.; Karner, M. Stillwater : The Service. DSU extension facts - Cooperative Extension Service, Oklahoma State University. Feb 1983. Feb 1983. (7162 rev.). 2 p. (NAL Call No.: S544.3.0505).

0435

**Cotton insect control (Gossypium hirsutum).**

Lambert, W.R. Herzog, G.A. Athens : The Service. Circular - Cooperative Extension Service, University of Georgia. Jan 1984. Jan 1984. (501, rev.). 2 p. ill. (NAL Call No.: 275.29 G29C).

0436

**Cotton insect control (Insecticides).**

Lambert, W.R. GA. Herzog, G.A. Athens, Ga., The Service. Circular - Cooperative Extension Service, University of Georgia, Georgia. University. Cooperative Extension Service. Mar 1980. Mar 1980. (501). 2 p. ill. (NAL Call No.: 275.29 G29C).

0437

**Cotton insect control research (Heliothis zea, Heliothis virescens).**

Melville, D.R. LA. Moppert, K.B.; Clower, D.F. Bossier City, The Station. Annual research report - Red River Valley Agricultural Experiment Station. Louisiana. Red River Valley Agricultural Experiment Station. 1979. 1979. p. 36-54. (NAL Call No.: 100 L9333).

0438

**Cotton insect management.**

Johnson, D.R. Bonner, C.M.; Kimbrough, J.J.; Wall, M.L. Little Rock : The Service. MP - University of Arkansas. Cooperative Extension Service. Apr 1983. Apr 1983. (52rev.). 12 p. (NAL Call No.: 275.29 AR4MI).

0439

**Cotton insect management with special reference to the boll weevil / edited by R.L. Ridgway, E.P. Lloyd, and W.H. Cross.**

Ridgway, R. L.; Lloyd, E. P.; Cross, W. H.; (William H.). (Washington, D.C.?) U.S. Dept. of Agriculture, Agricultural Research Service for sale by the Supt. of Docs. 1983. "Issued November 1983." xiii, 591 p. : ill., maps ; 23 cm. -. Includes bibliographies. (NAL Call No.: 1 Ag84Ah no.589).

0440

**Cotton (insect) pest control, where are we going? Back to management basics.**

Smith, R.H. Fresno, Calif., Western Agricultural Publishing Co. California Arizona cotton. May 1979. May 1979. p. 12, 17. (NAL Call No.: SB245.A1C3).

0441

**Cotton insect populations.**

Fye, R. E. (Washington) Dept. of Agriculture, Science and Education Administration : for sale by the Supt. of Docs., U.S. Govt. Print. Off. (1979). 65 p. : ill. ; 26 cm. -. Bibliography: p. 33-36. (NAL Call No.: 1 Ag84Te No.1592).

# (PESTS OF PLANTS - INSECTS)

0442

## Cotton leaf beetle control, 1969.

Morris, R.C. College Park, Md., Entomological Society of America. Insecticide and acaricide tests. 1976. (1). p. 103. (NAL Call No.: SB950.A1I49).

0443

## Cotton leafperforator (*Bucculatrix thurberiella*) and pink bollworm (*Pectinophora gossypiella*): effects on yields of 'Deltapine 16' and 'Pima 5-4' in field cages.

Benschoter, C.A. Leal, M.P. New York, Marcel Dekker. Journal of environmental science and health. Part A: Environmental science and engineering. 1978. v. 13 (3). p. 227-234. ill. 6 ref. (NAL Call No.: TD172.J6).

0444

## Cotton leafperforator (*Bucculatrix thurberiella*); behavior on the cotton plant.

Benschoter, C.A. Leal, M.P. College Park, Md. Annals Entomological Society of America. Jan 1979. v. 72 (1). p. 90-92. ill. 3 ref. (NAL Call No.: 420 EN82).

0445

## Cotton leafperforator (Lepidoptera: Lyonetiidae): effect of two microbial insecticides on field populations (*Bucculatrix thurberiella*, *Bacillus thuringiensis*, nuclear polyhedrosis virus, Arizona).

Bell, M.R. JEENA, Romine, C.L. College Park : Entomological Society of America. Journal of economic entomology. Dec 1982. v. 75 (6). p. 1140-1142. ill. 6 ref. (NAL Call No.: 421 J822).

0446

## Cotton pest (*Heliothis virescens*) invades lettuce.

Meister, H. San Francisco. Agrichemical age. Feb 1979. v. 23 (2). p. 8, 57C. ill. (NAL Call No.: 381 AG85).

0447

## Cotton: sample sizes required to estimate number of plants and fruiting forms by three systems of sampling (Insect damage in the field).

Wolfenbarger, D.A. AR-SO. Petersen, H.D.V.; Dupnik, T.D.; Harding, J.A. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. June 1980. v. 5 (2). p. 93-98. 9 ref. (NAL Call No.: QL461.S65).

0448

## Crop rotation vs. monoculture. I. Insect control (Pests of maize, cotton, rice, soybeans, sorghum).

Barnes, G. Madison, Wis., American Society of Agronomy. Crops and soils magazine. Jan 1980. v. 32 (4). p. 15-17. ill. (NAL Call No.: 6 W55).

0449

## Cultural control of the boll weevil (*Anthonomus grandis grandis*): influence of bed shape (Cotton pest, Texas).

Slosser, J.E. College Park, Md., Entomological Society of America. Journal of economic entomology. Oct 1981. v. 74 (5). p. 561-565. 11 ref. (NAL Call No.: 421 J822).

0450

## Cultural systems for (insect) pest management in cotton.

Walhood, V.T. El-Zik, K.M. St. Paul, Minn., American Phytopathological Society. Phytopathology. Sept 1979. v. 69 (9). p. 1048. (NAL Call No.: 464.8 P56).

0451

## Cymbush insecticide: a new broad spectrum pyrethroid insecticide (*Spodoptera* spp., cotton pests).

Moody, J.R. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 83-84. (NAL Call No.: 72.9 C8292).

0452

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Jany, W.C. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 86-88. (NAL Call No.: 72.9 C8292).

0453

## Degree-days: an aid in crop and pest management (Cotton, *Heliothis zea*).

Wilson, L.T. CAGRA. Barnett, W.W. Berkeley : The Station. California agriculture - California Agricultural Experiment Station. Jan/Feb 1983. v. 37 (1/2). p. 4-7. ill. (NAL Call No.: 100 C12CAG).



0454

Development and use of a machine for recovery of arthropods from plant leaves (*Tetranychus* spp., *Gossypium hirsutum*).

Leigh, T.F. Maggi, V.L.; Wilson, L.T. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 271-276. ill. Includes references. (NAL Call No.: 421 J822).

0455

Development, fecundity, and longevity of the tobacco budworm (*Lepidoptera: Noctuidae*) fed soybean, cotton, and artificial diet at three temperatures (*Heliothis virescens*).

Nadgauda, D.EVETB. Pitre, H. College Park : Entomological Society of America. Environmental entomology. Apr 1983. v. 12 (2). p. 582-586. Includes references. (NAL Call No.: QL461.E532).

0456

Development of cotton and associated beneficial and pest insect populations (*Heliothis*, *Pectinophora gossypiella*) in a ratoon field at Phoenix, Ariz.

Flint, H.M. AR-W-AR-W. Salter, S.S.; Walters, S. Washington, D.C., The Region. Agricultural reviews and manuals. ARM-W.United States. Dept. of Agriculture. Science and Education Administration. Western Region. May 1980. May 1980. (15). 14 p. 14 ref. (NAL Call No.: aS21.A75U64).

0457

Development of insecticide resistance in *Heliothis zea* and *Heliothis virescens* in North America (Cotton and crop pests).

Sparks, T.C. College Park, Md., The Society. Bulletin of the Entomological Society of America. Sept 1981. Literature review. v. 27 (3). p. 186-192. ill., maps. Includes 81 ref. (NAL Call No.: 423.9 EN8).

0458

Development of resistance of *Spodoptera littoralis* (Boisd.) (Pest of cotton) to Du-Ter (antifeedant, comparison with DDT).

El Attal, Z.M. Moustafa, O.K. Cambridge, Cambridge University Press. Journal of agricultural science. Oct 1979. v. 93 (pt.2). p. 257-260. ill. 5 ref. (NAL Call No.: 10 J822).

0459

Development of some lepidopterous cotton pests as affected by exposure to sublethal levels of endotoxins of *Bacillus thuringiensis* for different periods.

Salama, H.S. Foda, M.S.; El-Sharaby, A.; Matter, M.; Khalafallah, M. New York, Academic Press. Journal of invertebrate pathology. Sept 1981. v. 38 (2). p. 220-229. 19 ref. (NAL Call No.: 421 J826).

0460

Development of the fall armyworm on cotton, soybean and corn (*Spodoptera frugiperda*).

Pitre, H.N.GENSA. Hogg, D.B. Athens : The Society. Journal of the Georgia Entomological Society. Apr 1983. v. 18 (2). p. 182-187. Includes references. (NAL Call No.: QL461.G4).

0461

Developmental times of *Heliothis virescens* and *Heliothis subflexa* in relation to constant temperature (Pest of cotton in the United States).

Butler, G.D. Jr. Hamilton, A.G. Proshold, F.I. College Park, Md. Annals Entomological Society of America. Mar 15, 1979. v. 72 (2). p. 263-266. ill. 7 ref. (NAL Call No.: 420 EN82).

0462

Developmental times of *Heliothis zea* and *Heliothis virescens* (*Lepidoptera: Noctuidae*) and pupae in cotton (Mississippi).

Hogg, D.B. Calderon C., M. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1981. v. 10 (2). p. 177-179. ill. 11 ref. (NAL Call No.: QL461.E532).

0463

Di-flubenzuron feeding plus X-irradiation of boll weevils (*Anthonomus grandis*): effects of dose rate on sterility and survival (Cotton).

Haynes, J.W. Wright, J.E. Athens, Ga., The Society. Journal of the Georgia Entomological Society. July 1981. v. 16 (3). p. 376-385. ill. Bibliography p. 384-385. (NAL Call No.: QL461.G4).

0464

Dimilin: under a new marketing program (Boll weevil control throughout the cotton belt, United States).

Trammell, F.G. Memphis : National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 88. (NAL Call No.: 72.9 C8292).

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0465

Dispenser of laboratory diet into multiple rearing containers (for *Heliothis* spp., cotton pests).

Moore, R.F. AR-50. College Park, Md., Entomological Society of America. Journal of economic entomology. June 1980. v. 73 (3). p. 366-368. ill. 9 ref. (NAL Call No.: 421 J822).

0466

Distribution of *Heliothis* eggs on cotton plants is examined (Host plant-pest relationships, field study conducted in southeast Arkansas).

Bernhardt, J.L. AKFRA. Phillips, J.R. Fayetteville : The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Nov/Dec 1982. v. 31 (6). p. 4. (NAL Call No.: 100 AR42F).

0467

Distribution of tobacco budworm (Lepidoptera: Noctuidae) larvae within cotton plants (*Heliothis virescens*).

Ramalho, F.S. McCarty, J.C. Jr.; Jenkins, J.N.; Parrott, W.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 591-594. Includes references. (NAL Call No.: 421 J822).

0468

Diurnal variation in sweep net estimates of *Geocoris punctipes* (Say) (Hemiptera: Lygaeidae) density in cotton.

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**Effects of cotton genotype and early or no insecticide treatment on abundance of selected cotton insects in the Mississippi Delta (*Heliothis* spp., insect populations, sampling, *Lygus lineolaris*).**  
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0496

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0531

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0536

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0539

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0542

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0544

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Bull, D.L. Washington, American Chemical Society. Journal of agricultural and food chemistry. Mar/Apr 1979. v. 27 (2). p. 268-272. ill. 14 ref. (NAL Call No.: 381 J8223).

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0598

**Host plant resistance research methods for  
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0608

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0613

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0616

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0618

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(PESTS OF PLANTS - INSECTS)

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Mercado, H. Memphis, Tenn., National Cotton Council of America. Summary proceedings of the ... Beltwide Cotton Production Mechanization Conference. 1982. 1982. p. 101-103. (NAL Call No.: 72.9 C8292).

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Wilson, R.L. Wilson, F.D. College Park, Entomological Society of America. Journal of economic entomology. Apr 15, 1979. v. 72 (2). p. 216-219. ill. 10 ref. (NAL Call No.: 421 J822).

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Galloway, H.E. Memphis, Tenn., National Cotton Council of America. Summary proceedings of the ... Beltwide Cotton Production Mechanization Conference. 1982. 1982. p. 90-91. (NAL Call No.: 72.9 C8292).

0681

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Gravena, S.JEENA. Sterling, W.L. College Park; Entomological Society of America. Journal of economic entomology. Aug 1983. v. 76 (4). p. 779-784. Includes references. (NAL Call No.: 421 J822).

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0683

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Benedict, J.H. Leigh, T.F.; Hyer, A.H.; Wynholds, P.F. Madison, Wis., Crop Science Society of America. Crop science. Jan/Feb 1981. v. 21 (1). p. 28-30. 10 ref. (NAL Call No.: 64.8 C883).

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0687

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Herve, J.J. Housset, P.; Spencer, W. Memphis; National Cotton Council of America. Proceedings of the ... Beltwide Cotton Production-Mechanization Conference. 1983. 1983. p. 79-82. (NAL Call No.: 72.9 C8292).

0688

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Burke, H.R. Cate, J.R. College Park, Md. Annals Entomological Society of America. Mar 15, 1979. v. 72 (2). p. 189-192. ill. 6 ref. (NAL Call No.: 420 EN82).

0689

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Jones, S.L. Morrison, R.K. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Mar 1979. v. 4 (1). p. 14-19. ill. 9 ref. (NAL Call No.: QL461.S65).

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0690

**New tools in pest management: Traps, graphs, computer fight cotton insects.**  
San Francisco, California Farmer. Agrichemical age. July/Aug 1979. v. 23 (7). p. 6. ill. (NAL Call No.: 381 AG85).

0691

**No-choice study of plant-insect interactions for *Heliothis zea* (Boddie) (Lepidoptera: Noctuidae) on selected cottons.**  
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Lingren, P.D. Wolf, W.W. New York, Academic Press. Proceedings ... Biometeorology in integrated pest management. 1980 (pub. 1982). 1980 (pub. 1982). p. 211-228. ill. Includes 2 p. ref. (NAL Call No.: SB950.A2B57).

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**Nocturnal behavior of adult cotton leafperforators (*Bucculatrix thurberiella*) in cotton (Arizona).**  
Lingren, P.D. AR-W. Henneberry, T.J.; Bariola, L.A. College Park, Md., The Society. Annals - Entomological Society of America. Entomological Society of America. Jan 1980. v. 73 (1). p. 44-48. ill. 15 ref. (NAL Call No.: 420 EN82).

0694

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0695

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0696

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Burleigh, J.G. AR. Katayama, R.W.; Hubbard, L. Fayetteville, Ark., The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. July/Aug 1980. v. 29 (4). p. 9. ill. (NAL Call No.: 100 AR42F).

0697

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**Pink bollworm (Lepidoptera:Gelechiidae) effects of natural infestation on upland and Pima cottons untreated and treated with insecticide (Gossypium hirsutum, Gossypium barbadense, Pectinophora gossypiella).**

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Wilson, F.D. George, B.W.; Szaro, J.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. June 1984. v. 77 (3). p. 709-714. Includes references. (NAL Call No.: 421 J822).

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Graham, H.M. AR-W-AR-W. Washington, D.C., The Region. Agricultural reviews and manuals. ARM-W - United States, Dept. of Agriculture, Science and Education Administration, Western Region. June 1980. June 1980. (16). p. 5-8. 11 ref. (NAL Call No.: aS21.A75U64).

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**Pink bollworm (*Pectinophora gossypiella*) control: potential of cotton crop management to selectivity limit host availability.**

Henneberry, T.J. AR-W-AR-W. Bariola, L.A.; Kittock, D.L. Washington, D.C., The Region. Agricultural reviews and manuals. ARM-W - United States, Dept. of Agriculture, Science and Education Administration, Western Region. June 1980. Literature review. June 1980. (16). p. 9-23. ill. 43 ref. (NAL Call No.: aS21.A75U64).

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Henneberry, T.J. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. 1979. p. 44-46. 29 ref. (NAL Call No.: SB249.N6).

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**Pink bollworm (*Pectinophora gossypiella*, pest of cotton): effects of temperature, photoperiod and light intensity, moth age, and mating frequency on oviposition and egg viability.**

Henneberry, T.J. Leal, M.P. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 15, 1979. v. 72 (4). p. 489-492. ill. 9 ref. (NAL Call No.: 421 J822).

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0744

**Pink bollworm (*Pectinophora gossypiella*): reduced growth and survival of larvae placed on bolls of cotton race stocks.**

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**Pink bollworm (*Pectinophora gossypiella*): response of native males to ratios of Z,Z- and Z,E-isomers of gossyplure in several cotton growing areas of the world.**

Flint, H.M. Balasubramanian, M. College Park, Md., Entomological Society of America. Journal of economic entomology. Oct 1979. v. 72 (5). p. 758-762. ill. 26 ref. (NAL Call No.: 421 J822).

0746

**Pink bollworm: seasonal oviposition, egg predation, and square and boll infestations in relation to cotton plant development (Pectinophora gossypiella, Arizona).**  
Henneberry, T.J. Clayton, T.E. College Park, Md., Entomological Society of America. Environmental entomology. June 15, 1982. v. 11 (3). p. 663-666. Includes ref. (NAL Call No.: QL461.E532).

0747

**Pink bollworms (Pectinophora gossypiella): a 5-year study of cultural control in southern Arizona (Bracon kirkpatricki, Chelonus blackburni, cotton).**  
Fye, R.E. Berkeley, Calif., Office of the Regional Administrator for Federal Research (Western Region), Science and Education Administration, U.S. Dept. of Agriculture. ARR-W, Agricultural research results. United States. Dept. of Agriculture. Science and Education Administration. Western Region. Feb 1979. Feb 1979. (3). 10 p. ill., map. 15 ref. (NAL Call No.: aS21.S22U5).

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**Plant bug reduction through the use of Premerge 3 dinitro amine herbicide as a directed spray in cotton.**  
Miller, W.O. Miller, C.E. Midland, Dow Chemical Company. Down to earth. Summer 1979. v. 35 (3). p. 14-15. ill. (NAL Call No.: 381 D75).

0749

**Plant resistance and modified cotton culture (Anthonomus grandis, integrated pest management, insect resistant cultivars).**  
Namken, L.N.XAAHA. Heilman, M.D.; Jenkins, J.N.; Miller, P.A. Washington: The Department of Agriculture handbook - United States Department of Agriculture. Nov 1983. Nov 1983. (589). p. 73-101. maps. Includes references. (NAL Call No.: 1 AG84AH).

0750

**Plant resistance and modified cotton culture (Biological control of Heliothis species, cotton insect predators).**  
Namken, L.N.XAAHA. Heilman, M.D.; Jenkins, J.N.; Miller, P.A. Washington: The Department of Agriculture handbook - United States Department of Agriculture. Nov 1983. Nov 1983. (589). p. 103-127. ill. Includes references. (NAL Call No.: 1 AG84AH).

0751

**Populations of the tarnished plant bug (Lygus lineolaris), bollworm, and tobacco budworm (Heliothis spp.) in selected cottonfields of Panola and Pontotoc Counties, Mississippi, 1977.**  
Scott, W.F. Smith, J.W.; Parencia, C.R. New Orleans, The Region. Abstract: Populations were monitored by vacuum-machine sampling and examining plants to develop baseline data, refine techniques, and improve procedures for the Optimum Pest Management Trial in Panola County, initiated in 1978. Four fields of 20 in Panola County were planted to a nectariless cultivar, all other fields, including 10 in Pontotoc County, were planted to nectaried cultivars. Infestations of the tarnished plant bug were not severe enough to be of much concern, and only four fields were treated for control. Fields of the nectarilesscultivar had somewhat lower populations than those of the nectaried cultivars. Populations of bollworms and tobacco budworms were light to moderate in these fields. Average insecticide applications of 3.9 and 1.6 per field were made in Panola and Pontotoc Counties, respectively, to control Heliothis spp., but three fields in Pontotoc County were not treated with any insecticide. Sampling of tarnished plant bugs by vacuum machine was more efficient than by counting, producing 3.5 and 2.9 times as many bugs in Panola and Pontotoc Counties, respectively. Agricultural reviews and manuals; ARM-S - United States Dept. of Agriculture, Science and Education Administration, Agricultural Research, Southern Region. Sept 1980. Sept 1980. (11). 7 p. ill. 6 ref. (NAL Call No.: aS21.A75U65).

0752

**Potential of Heliothis spp. (Lepidoptera: Noctuidae)-resistant cottons in limited-irrigation situations.**  
Slosser, J.E.JEENA. College Park: Entomological Society of America. Journal of economic entomology. Aug 1983. v. 76 (4). p. 864-868. Includes references. (NAL Call No.: 421 J822).

0753

**Potential of sterile moth releases for pink bollworm (Pectinophora gossypiella) management (southwestern desert cotton-growing areas of Arizona, southern California).**  
Henneberry, T.J. AR-W-AR-W. Washington, D.C., The Region. Agricultural reviews and manuals. ARM-W - United States, Dept. of Agriculture, Science and Education Administration, Western Region. June 1980. June 1980. (16). p. 52-66. 35 ref. (NAL Call No.: aS21.A75U64).

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**Pounce 3.2EC plus oil for cotton insect control.**

McDaniel, S.G. Dunbar, D.M. Memphis, National Cotton Council. Proceedings - Beltwide Cotton Production Research Conference. 1981. 1981. p. 77-78. 111. (NAL Call No.: SB249.N6).

0755

**Precision of several sampling techniques for foraging red imported fire ant (Hymenoptera: Formicidae) workers in cotton fields (Solenopsis invicta, Anthonomus grandis, biological control).**

Fillman, D.A. JEENA, Sterling, W.L.; Dean, D.A. College Park : Entomological Society of America. Journal of economic entomology. Aug 1983. v. 76 (4). p. 748-751. Includes references. (NAL Call No.: 421 J822).

0756

**Predation of boll weevils (Anthonomus grandis) in partially-open cotton bolls by the red imported fire ant (Solenopsis invicta).**

Agnew, C.W. Sterling, W.L. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Sept 1981. v. 6 (3). p. 215-219. 7 ref. (NAL Call No.: QL461.S65).

0757

**Predation of Heliothis virescens (F.) eggs on cotton in east Texas.**

McDaniel, S.G. Sterling, W.L. College Park, Md., Entomological Society of America. Environmental entomology. Feb 1982. v. 11 (1). p. 60-66. Includes 1 p. ref. (NAL Call No.: QL461.E532).

0758

**Predation of Heliothis virescens (Lepidoptera: Noctuidae) eggs by Geocoris punctipes (Hemiptera: Lygaeidae) adults on cotton.**

Hutchison, W.D. EVETB, Pitre, H.N. College Park : Entomological Society of America. Environmental entomology. Dec 1983. v. 12 (6). p. 1652-1656. Includes references. (NAL Call No.: QL461.E532).

0759

**Predator determination and efficiency on Heliothis virescens eggs in cotton using 32P2 (Phosphorus isotope, natural control, Texas).**

McDaniel, S.G. Sterling, W.L. College Park, Md., Entomological Society of America. Environmental entomology. Dec 1979. v. 8 (6). p. 1083-1087. 111. 29 ref. (NAL Call No.: QL461.E532).

0760

**Predator-prey relationship of Geocoris punctipes and Heliothis virescens (Pests of cotton, Natural control).**

Lawrence, R.K. Watson, T.F. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1979. v. 8 (2). p. 245-248. 111. 7 ref. (NAL Call No.: QL461.E532).

0761

**Predators of tobacco budworm (Heliothis virescens) larvae in Texas cotton (Arthropod predators, biological control).**

McDaniel, S.G. Sterling, W.L.; Dean, D.A. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. June 1981. v. 6 (2). p. 102-108. Bibliography p. 108. (NAL Call No.: QL461.S65).

0762

**Predatory arthropods and their relationship to fleahoppers (Pseudatomoscelis seriatus) on Heliothis-resistant cotton varieties in southwestern Oklahoma.**

Mussett, K.S. Young, J.H. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Mar 1979. v. 4 (1). p. 35-39. 111. 6 ref. (NAL Call No.: QL461.S65).

0763

**Preliminary econometric analysis of cotton yield and optimum pest management in 1977 and 1978 (Trial in Mississippi and boll weevil eradication in North Carolina, production costs and returns).**

Lin, Y.N. MS. Smith, J.W.; Parvin, D.W. Jr. Mississippi State, The Station. AEC M.R. - Mississippi Agricultural and Forestry Experiment Station. Mar 1980. Mar 1980. (98). 27 p. 23 ref. (NAL Call No.: 100 M69MR).

0764

**Preoviposition periods and oviposition rates of insectary-reared boll weevils (Anthonomus grandis grandis) in west Tennessee (Cotton pests).**

Lambert, L. Lentz, G.L.; Cherry, E.T. College Park, Md., Entomological Society of America. Environmental entomology. Dec 1979. v. 8 (6). p. 1092-1094. 111. 7 ref. (NAL Call No.: QL461.E532).

0785

**Presence-absence sampling of spider mite (*Tetranychus*) densities on cotton.**  
Wilson, L.T. Leigh, T.F.; Maggi, V. Berkeley, Calif., The Station. California agriculture - California Agricultural Experiment Station. July/Aug 1981. v. 35 (7/8). p. 10. (NAL Call No.: 100 C12CAG).

0766

**Primordial square formation in cotton and the cotton fleahopper (*Pseudatomoscelis seriatus*).**  
Walker, J.K. Niles, G.A. College Station, Tex. : Southwestern Entomological Society. The Southwestern entomologist. Mar 1984. v. 9 (1). p. 104-108. Includes references. (NAL Call No.: QL461.S65).

0767

**Pros and cons of stub cotton (in Arizona, insect control).**  
Taylor, B.B. Hathorn, S. Jr. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. p. 25-26. ill. (NAL Call No.: SB249.N6).

0768

**Pydrin: a new (cotton) insecticide.**  
Bierman, R.H. Memphis, National Cotton Council of America. Proceedings. Beltwide Cotton Production-Mechanization Research Conference. 1979. p. 81-82. ill. (NAL Call No.: SB249.N6).

0769

**Pyrethroid resistance in a strain of *Spodoptera littoralis* (Cotton leafworm) is correlated with decreased sensitivity of the CNS (central nervous system) in vitro.**  
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**Resistance of cotton, *Gossypium hirsutum* L., to natural field populations of twospotted spider mites (*Acari: Tetranychidae*) (*Tetranychus urticae*).**

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Hamman, Philip James, 1932. 1971. Thesis (Ph.D.)--Texas A&M University, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. x, 96 leaves ; 21 cm. Bibliography: leaves 89-95. (NAL Call No.: DISS 72-5,665).

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**Screening cotton for resistance to pink bollworm (*Pectinophora gossypiella*).**

Wilson, F.D. George, B.W.; Wilson, R.L. Washington, D.C., The Region. Agricultural reviews and manuals; ARM-W - United States, Dept. of Agriculture, Science and Education Administration, Western Region. June 1981. June 1981. (22). 22 p. 11 ref. (NAL Call No.: aS21.A75U64).

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**Screening cotton for resistance to spider mites (*Tetranychus* spp., *Gossypium*).**

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**Seasonal effects on the biology of and damage by tobacco budworm in cotton (*Heliothis virescens*, Arizona).**

Tollefson, M.S. Watson, T.F. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 15, 1981. v. 74 (6). p. 714-717. Includes 13 ref. (NAL Call No.: 421 J822).

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**Seasonal pattern of boll weevil, *Anthonomus grandis* Boheman, emergence from cotton squares in West Tennessee.**

Mullins, J.W. Lentz, G.L. Athens, Ga., The Society. Journal of the Georgia Entomological Society. Jan 1981. v. 16 (1). p. 21-27. ill. 11 ref. (NAL Call No.: QL461.G4).

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**Selection with chitin biosynthesis inhibitor (DIMILIN) for resistance and cross-resistance in the cotton leafworm *Spodoptera littoralis* (Boisd.).**

Radwan, H.S.A. London. International pest control. Nov/Dec 1978. v. 20 (6). p. 21-23. ill. 22 ref. (NAL Call No.: 79.8 P432).

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**Selective methods for managing insect pests (*Anthonomus grandis grandis*) of cotton (biological control).**

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**Sequential sampling for arthropods of cotton: its advantages over point sampling (Pest control, Texas).**

Rothrock, M.A. Sterling, W.L. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. June 1982. v. 7 (2). p. 70-81. 2 p. ref. (NAL Call No.: QL461.S65).

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**Sequential sampling for boll weevils in cotton: a simulation study (Model, *Anthonomus grandis grandis*).**

McKibben, G.H. GENSA. Athens : The Society. Journal of the Georgia Entomological Society. Apr 1983. v. 18 (2). p. 224-229. Includes references. (NAL Call No.: QL461.G4).

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**Sex pheromone of Egyptian cotton leafworm (*Spodoptera littoralis*): its chemical transformations under field conditions.**

Shani, A. Klug, J.T. New York, Plenum Press. Journal of chemical ecology. Sept 1980. v. 6 (5). p. 875-881. ill. 9 ref. (NAL Call No.: QD415.A1J6).

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**Sex pheromone traps as a means of improving control programs for the cotton bollworm, *Heliothis armigera* (Lepidoptera: Noctuidae) (Israel).**

Kehat, M. Gothilf, S.; Dunkelblum, E.; Greenberg, S. College Park, Md., Entomological Society of America. Environmental entomology. June 15, 1982. v. 11 (3). p. 727-729. ill. 10 ref. (NAL Call No.: QL461.E532).

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**Short-range movement of major agricultural pests (Lygus bugs in the westside of the San Joaquin Valley, California, pest of cotton).**

Van Steenwyk, R. Wallops Island, Va., Wallops Flight Center, NASA, 1979. Radar, insect population ecology, and pest management, editors Charles R. Vaughn, and Wayne Wolf and Waldemar Klassen. p. 17-21. 11 ref. (NAL Call No.: SB931.R3).

0809

**Short season cotton in the Imperial Valley with special reference to pest management (*Pectinophora gossypiella*, yields).**

Walhood, V.T. Memphis (etc.), Southwest Five-State Cotton Growers Association. Summary proceedings - Western Cotton Production Conference Western Cotton Production Conference. 1979. 1979. p. 48-51. (NAL Call No.: 72.8



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**Short-season cotton production systems as an alternative to heavy applications of insecticides in the Mississippi Delta.**

Bieber, J.L. Lin, Y.N.; Parvin, D.W. Jr. Mississippi State, The Station. Extract: The objective of this paper is to examine the cost-return relationships of new technology involving early varieties, a truncated production season, and fewer pesticide treatments under Delta conditions where the principal insect pests are the cotton bollworm, *Heliothis zea* (Boddie), and the tobacco budworm, *Heliothis virescens* (F.). Concern with environmental problems associated with heavy pesticide use has brought about increased interest in alternative pest management strategies. This paper attempts to anticipate whether Delta cotton farmers will find short-season cotton production an acceptable alternative to current practices. AEC research report - Mississippi Agricultural and Forestry Experiment Station, July 1981. July 1981. (125). 31 p. 38 ref. (NAL Call No.: 917031(AGE)).

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**The short-season effect in cotton and escape from the boll weevil / R. D. Parker ... (et al.).**

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**Shortening the cotton season: can the savings in bug and water costs outweigh lower yield.**

Fowler, R.G. AR. Tucson, The Service. Progressive agriculture in Arizona - Arizona University, Cooperative Extension Service. Spring 1980. v. 31 (2). p. 8-9. ill. (NAL Call No.: 6 P9452).

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Dennehy, T.J.CAGRA. Granett, J. Berkeley : The Station. California agriculture - California Agricultural Experiment Station. Nov/Dec 1982. v. 36 (11/12). p. 11-12. ill. (NAL Call No.: 100 C12CAG).

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**Simplified method of modeling cotton insect damage.**

Hartstack, A.W. Witz, J.A. St. Joseph, Mich., The Society. Paper - American Society of Agricultural Engineers. 1981. 1981. (81-4019). 7 p. ill. Includes 4 ref. (NAL Call No.: 290.9 AM32P).

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Sevacherian, V. El-Zik, K.M. Mesquite, Tex. : Haughton Publishing Co. The Cotton gin and oil mill press. Dec 24, 1983. v. 84 (26). p. 12-17, 19. (NAL Call No.: 304.8 C822).

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**Some interactions of the pink bollworm (*Pectinophora gossypiella*) and cotton fruiting structures.**

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**Some proposed regional areawide cotton insect management programs (USA).**

Ridgway, R.L. Memphis, Tenn., National Cotton Council of America. Summary proceedings of the ... Beltwide Cotton Production Mechanization Conference. 1982. 1982. p. 89-90. 11 ref. (NAL Call No.: 72.9 C8292).

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**Spatial distribution pattern, sequential sampling and host preference of *Lygus hesperus* Knight and *L. elisus* Van Duzee in California cotton fields / by Vahram Sevacherian.**

Sevacherian, V. 1970. Thesis (Ph.D.)--University of California, Riverside, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xvi, 176 leaves : ill. ; 21 cm. Bibliography: leaves 160-176. (NAL Call No.: DISS 71-20,258).

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**Status of the cooperative boll weevil (*Anthonomus grandis*) program (Cotton).**

Keller, K.R. Memphis, National Cotton Council. Proceedings - Beltwide Cotton Production Research Conference. 1981. 1981. p. 45-48. (NAL Call No.: SB249.N6).

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Status of *Trichogramma* wasps as a management tool for *Heliothis* control (Cotton pests, biological control).

Morrison, R.K. Ables, J.R.; Bouse, L.F.; Bull, D.L. Memphis (etc.), Southwest Five-State Cotton Growers Association. Summary proceedings - Western Cotton Production Conference Western Cotton Production Conference. 1981. 1981. p. 34-35. 4 ref. (NAL Call No.: 72.8 W522).

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Sterility of boll weevils (*Anthonomus grandis grandis*) in the field following treatment with diflubenzuron and gamma irradiation (Cotton). Mitchell, E.B. Merkl, M.E.; Wright, J.E.; Davich, T.B.; Heiser, R.F. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1980. v. 73 (6). p. 824-826. maps. 7 ref. (NAL Call No.: 421 J822).

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Sterilization of boll weevils with combined chemosterilant and irradiation treatments (Cotton pest, genetic control, sterilization, *Anthonomus grandis*).

Haynes, J.W. Wright, J.E. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Mar 1982. v. 7 (1). p. 56-59. Includes 5 ref. (NAL Call No.: QL461.S65).

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The stochastic effects of a ban on toxaphene use on cotton.

Weisz, R.N. Miller, R.R.; Quinby, W. Washington, The Service. Extract: We present a methodology that can be used to incorporate risk implications into evaluations of pesticide policies using the economic model National Agricultural Policy Simulator, PDLYSIM, particularly its cotton yield and acreage equations. The model can be made stochastic, which allows the decisionmaker to evaluate the statistical characteristics associated with the consequences of alternative policies. Agricultural economics research - U.S. Dept. of Agriculture, Economics, Statistics, and Cooperatives Service. July 1979. v. 31 (3). p. 11-21. 19 ref. (NAL Call No.: 1 EC7AGR).

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Strain and within-season variability of various allelochemics within a diverse group of cottons (Host plant resistance, *Heliothis virescens*).

White, W.H. CRPSA. Jenkins, J.N.; Parrott, W.L.; McCarty, J.C.; Collum, D.H.; Hedin, P.A. Madison : Crop Science Society of America. Crop science. Nov/Dec 1982. v. 22 (6). p. 1235-1238. 14 ref. (NAL Call No.: 64.8 C883).

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A strain of *Bacillus thuringiensis* var. *entomocidus* with high potential activity on *Spodoptera littoralis* (Cotton leafworm, biological control).

Salama, H.S. Foda, M.S. New York, Academic Press. Journal of invertebrate pathology. Jan 1982. v. 39 (1). p. 110-111. (NAL Call No.: 421 J826).

0826

Stub cotton in Arizona (*Heliothis*, *Pectinophora gossypiella*).

Taylor, B.B. Hathorn, S. Jr. Memphis (etc.), Southwest Five-State Cotton Growers Association. Summary proceedings - Western Cotton Production Conference Western Cotton Production Conference. 1979. 1979. p. 31-32. (NAL Call No.: 72.8 W522).

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Studies on: biogenesis of abscisic acid in cotton plants infected by *Verticillium albo-atrum*; and control of *Verticillium* wilt by the systemic fungicide, benomyl.

Mee, Henry Ming-Ling. Ann Arbor, Mich. University Microfilms 1973. Thesis--University of California, Riverside, 1972. xv, 99 leaves. Includes bibliographies. (NAL Call No.: DISS 73-15,629).

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Studies on lipids in the hemolymph of the cotton leaf worm, *Spodoptera littoralis*, late final instar larvae, infected with nuclear polyhedrosis virus (Biological control).

Boctor, I.Z. New York, Academic Press. Journal of invertebrate pathology. Nov 1981. v. 38 (3). p. 434-436. (NAL Call No.: 421 J826).

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Studies on the cottonwood leaf beetle, *Chrysomela scripta* (Fab.) with emphasis on reproductive potential, biology, parasites and predators, insecticide resistance, and esterase comparisons / by Robert B. Head.

Head, Robert B. Ann Arbor, Mich. University Microfilms 1972. Thesis--Mississippi State University, 1972. Facsimile produced by microfilm-xerography. ix, 58 leaves. Bibliography: leaves (57)-58. (NAL Call No.: DISS 73-166).

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**A summary of cotton insect control with Ambush insecticide in the southwest USA.**

King, E. Robinson, R. Mexico, D.F., Sociedad Mexicana de Entomologia. Folia entomologica Mexicana. June 1978. June 1978. (39/40). p. 72-73. (NAL Call No.: 421 F712).

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**Suppressing bollworms by mowing (Tobacco budworm, cotton pests).**

Carriere, B. Washington, D.C., The Service. Agricultural research - United States Agricultural Research Service. Mar 1982. v. 30 (9). p. 7. (NAL Call No.: 1.98 AG84).

0832

**Suppression of Heliothis spp. on cotton by using Bacillus thuringiensis, Baculovirus heliothis, and two feeding adjuvants (Biological control).**

Johnson, D.R. College Park, Md., Entomological Society of America. Journal of economic entomology. Apr 1982. v. 75 (2). p. 207-210. ill. 7 ref. (NAL Call No.: 421 J822).

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**A survey of the host plants and seasonal distribution of the cotton fleahopper (Hemiptera : Miridae) in the delta of Arkansas, Louisiana, and Mississippi (Pseudatomoscelis seriatus).**

Snodgrass, G.L. Scott, W.P.; Smith, J.W. Athens : The Society. Journal of the Georgia Entomological Society. Jan 1984. v. 19 (1). p. 34-41. Includes references. (NAL Call No.: QL461.G4).

0834

**Survival of tobacco budworm (Lepidoptera: Noctuidae) larvae after short-term feeding periods on cotton treated with Bacillus thuringiensis (Heliothis virescens, biological control, Arizona).**

Ali, A.S.A. Watson, T.F. College Park, Entomological Society of America. Journal of economic entomology. Aug 1982. v. 75 (4). p. 630-632. 6 ref. (NAL Call No.: 421 J822).

0835

**Susceptibility of Heliothis virescens (F.) (Lepidoptera:Noctuidae) larvae to microbial agent-chemical pesticide mixtures on cotton foliage (Bacillus thuringiensis, Heliothis nuclear polyhedrosis virus).**

Mohamed, A.I.EVETB. Young, S.Y.; Yearian, W.C. College Park : Entomological Society of America. Environmental entomology. Oct 1983. v.

12 (5). p. 1403-1405. Includes references. (NAL Call No.: QL461.E532).

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**Synergism of pyrethroid insecticides by formamidines against Heliothis (zea, Heliothis virescens) pests of cotton.**

Plapp, F.W. Jr. College Park, Md., Entomological Society of America. Journal of economic entomology. Oct 1979. v. 72 (5). p. 667-673. ill. 8 ref. (NAL Call No.: 421 J822).

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**System for mass rearing boll weevil (Anthonomus grandis) in a laboratory (Cotton).**

Griffin, J.G. Lindig, O.H. Mississippi State, The Station. Technical bulletin.Mississippi. Agricultural and Forestry Experiment Station. Apr 1979. Apr 1979. (95). 15 p. ill. 15 ref. (NAL Call No.: S79.E8).

0838

**Tachinid flies collected in a Phoenix, Arizona cotton field (Parasites of Trichoplusia and Heliothis, cotton pests).**

Werner, F.G. AR-W. Butler, G.D. Jr. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Dec 1979. v. 4 (4). p. 282-284. ill. 7 ref. (NAL Call No.: QL461.S65).

0839

**Tarnished plant bug control on cotton, 1980 (Lygus lineolaris).**

Muehleisen, D.P. Gaylor, M.J. College Park : Entomological Society of America. Insecticide and acaricide tests. 1982. v. 7. p. 161. (NAL Call No.: SB950.A1I49).

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**Tarnished plant bug (Heteroptera:Miridae) nymph numbers decreased on caged nectariless cottons (Lygus lineolaris, Gossypium hirsutum).**

Bailey, J.C. Scales, A.L.; Meredith, W.R. Jr. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 68-69. Includes references. (NAL Call No.: 421 J822).

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**Technique for applying Heliothis virescens (F.) (Lepidoptera:Noctuidae) eggs to cotton.**

Bailey, J.C. Meredith, W.R. Jr. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 265-266. Includes references. (NAL Call No.:

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**Temperature--its effect on cotton and cotton insects (Growth models, degree days, rainfall, 1930-1980, interactions, Oklahoma).**

Young, J.H. Willson, L.U.; Strabala, M.A. Stillwater : The Station. Research report P - Agricultural Experiment Station, Oklahoma State University. Apr 1983. Apr 1983. (P-831). 33 p. ill. Includes references. (NAL Call No.: 100 OK4M).

0843

**Temperature thresholds for spring emergence and flight of the boll weevil (Anthonomus grandis grandis, cotton pests).**

Jones, D. USDA. Sterling, W.L. College Park, Md., Entomological Society of America. Environmental entomology. Dec 1979. v. 8 (6). p. 1118-1122. ill. 25 ref. (NAL Call No.: QL461.E532).

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**Termination of diapause in the tobacco budworm (Heliothis virescens) in Arizona (Cotton).**

Potter, M.F. Watson, T.F. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1980. v. 73 (6). p. 847-850. 14 ref. (NAL Call No.: 421 J822).

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**Testing of various spray schedules against cotton pests (Amrasca devastans, Pectinophora gossypiella).**

Sidhu, A.S. Dhawan, A.K. New Delhi, Entomological Society of India. Indian journal of entomology. Sept 1978. v. 40 (pt.3). p. 324-327. ill. 10 ref. (NAL Call No.: 420 IN23).

0846

**Texas Pest Management Association producers implementing IPM (Integrated Pests Management) in Texas (Cotton pests).**

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Bird, L.S. TX. College Station, Tex., The Station. MP - Texas Agricultural Experiment Station. July 1980. July 1980. (1451). p. 86-100. ill. Bibliography p. 97-100. (NAL Call No.: 100 T31M).

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Kraus-Schmidt, H. Lewis, S.A. Ames, Iowa, Society of Nematologists. Journal of nematology. Jan 1981. v. 13 (1). p. 41-48. ill.

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Crawford, J.L. Memphis, National Cotton Council. Proceedings - Beltwide Cotton Production Research Conference. 1981. p. 31-32. (NAL Call No.: SB249.N6).

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Carter, W.W. Ames, Iowa, Society of Nematologists. Journal of nematology. July 1981. v. 13 (3). p. 368-374. ill. 17 ref. (NAL Call No.: QL391.N4J62).

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Hunter, Richard E. (Richard Edmund), 1923. 1968. Thesis (Ph.D.)--Oklahoma State University, 1968. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. viii, 68 leaves : ill. ; 21 cm. Bibliography: leaves 56-59. (NAL Call No.: DISS 69-14,264).

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DeVay, J.E. Pullman, G.S. Memphis, Tenn.. National Cotton Council of America. Summary proceedings of the ... Beltwide Cotton Production Mechanization Conference. 1982. 1982. p. 54-55. ill. 6 ref. (NAL Call No.: 72.9 C8292).

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Schnathorst, W.C. Memphis, National Cotton Council. Proceedings - Beltwide Cotton Production Research Conference. 1981. 1981. p. 52-53. (NAL Call No.: SB249.N6).

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**Interrelations among resistance to bacterial blight, fusarium wilt and seed and seedling characters in cotton / by Kishor Bhimhai. Desai.**

Desai, Kishor Bhimhai, 1929. 1970. Thesis--Texas A&M University. Photocopy of typescript. Ann Arbor: University Microfilms, 1971. xii, 96 leaves. Bibliography: leaves 92-96. (NAL Call No.: DISS 70-22,918).

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Ehrlich, K.C. DeLuca, A.J. II; Ciegler, A. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. July 1984. v. 48 (1). p. 1-4. ill. Includes 8 references. (NAL Call No.: 448.3 AP5).

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Guidroz, Gerald F., 1970. Thesis--Louisiana State University. Photocopy of typescript. Ann Arbor: University Microfilms, 1971. ix, 74 leaves. Bibliography: leaves 72-73. (NAL Call No.: DISS 70-18,531).

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Ashworth, L.J. Jr. CA. Huisman, D.C. Berkeley, Calif., The Station. California agriculture - California Agricultural Experiment Station. Oct 1980. v. 34 (10). p. 19-20. ill. (NAL Call No.: 100 C12CAG).

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Papavizas, G.C. AR-BARC-AR-SO. Lewis, J.A.; Minton, E.B.; O'Neill, N.R. St. Paul, Minn., American Phytopathological Society. Phytopathology. Feb 1980. v. 70 (2). p. 113-118. ill. 29 ref. (NAL Call No.: 464.8 P56).

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Shokes, F.M. McCarter, S.M. St. Paul, American Phytopathological Society. Phytopathology. May 1979. v. 69 (5). p. 510-516. ill. 37 ref. (NAL Call No.: 464.8 P56).

1004

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Schroeder, M.L. Snow, J.P. St. Paul, American Phytopathological Society. Plant disease. Nov 1982. v. 66 (11). p. 1049-1050. ill. 6 ref.

(NAL Call No.: 1.9 P69P).

1005

**Performance of multi-adversity resistant (MAR) cottons in the Texas Rolling Plains (Cultivars, yields, *Verticillium* wilt).**

Clark, L.E. Bourland, F.M. College Station, Tex., The Station. PR.Texas. Agricultural Experiment Station. May 1979. May 1979. (3560). 9 p. ill. 6 ref. (NAL Call No.: 100 T31P).

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***Phymatotrichum (cotton)* root rot.**

Lyda, S.D. Memphis : Southwest Five-State Cotton Growers Association. Summary proceedings - Western Cotton Production Conference. 1983. 1983. p. 46-49. ill. Includes references. (NAL Call No.: 72.8 W522).

1008

**Physical and chemical changes produced in bleached cotton duck by *Chaetomium globosum* and *Spirochaeta cytophaga* by Ruth Elmquist Rogers, Helen G. Wheeler, and Harry Humfield.**

Rogers, Ruth Elmquist. Washington, D.C. U.S. Dept. of Agriculture 1940. 35 p., 2 leaves of plates : ill. -. Bibliography: p. 33-35. (NAL Call No.: Fiche S-69 no.726).

1009

**Production of nonglandular terpenoid aldehydes within diseased seeds and cotyledons of *Gossypium hirsutum* L. (cotton, *Aspergillus niger*, *Verticillium dahliae*, *Colletotrichum dematium*).**

Halloin, J.M. Bell, A.A. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. Nov/Dec 1979. v. 27 (6). p. 1407-1409. ill. 10 ref. (NAL Call No.: 381 J8223).

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**Reducing sugars and minerals from lint of unopened cotton bolls as a substrate for aflatoxin and kojic acid synthesis by *Aspergillus flavus* (*Gossypium hirsutum*, infection).**

Lee, L.S. PHYTA. Conkerton, E.J.; Ehrlich, K.C.; Ciegler, A. St. Paul : American Phytopathological Society. Phytopathology. May 1983. v. 73 (5). p. 734-736. Includes references. (NAL Call No.: 464.8 P56).

1011

**The relation of fertilizers to the control of cotton root rot in Texas by H.V. Jordan ... (et al.).**

Jordan, H. V.; (Howard Vernon). Washington, D.C. U.S. Dept. of Agriculture 1934. 76 p. : ill., map -. Bibliography: p. 72-75. (NAL Call No.: Fiche S-69 no.426).

1012

**Relationship of pathogen inoculum to cotton seedling disease control with fungicides (*Pythium ultimum*, *Rhizoctonia solani*, *Thielaviopsis basicola*).**

Garber, R.H. DeVay, J.E. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. Mar 1979. v. 63 (3). p. 246-250. ill. 13 ref. (NAL Call No.: 1.9 P69P).

1013

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Davis, R.G. Mississippi State, The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Apr 1982. v. 7 (1). 3 p. 2 ref. (NAL Call No.: S79.E37).

1014

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Davis, R.G. Mississippi State : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. June 1983. v. 46 (6). p. 7-8. Includes references. (NAL Call No.: 100 M69MI).

1015

**Report of the Cottonseed Treatment Committee for 1977 (Fungicides, cotton).**

Minton, E.B. Fest, G.A. Dallas. The Cotton gin and oil mill press. Nov 18, 1978. v. 79 (23). p. 12-18. ill. (NAL Call No.: 304.8 C822).

1016

**Report of the Cottonseed Treatment Committee for 1979 (Fungicides).**

Minton, E.B. (comp.). Mesquite, Haughton Publishing Company of Texas. The Cotton gin and oil mill press. Mar 8, 1980. v. 81 (5). p. 18-19, 22. (NAL Call No.: 304.8 C822).

1017

**Resistance to fusarium wilt pathogen in currently used cotton cultivars (*Gossypium*, *Fusarium oxysporum*).**

Kappelman, A.U. Jr. St. Paul, Minn., American Phytopathological Society. Plant disease. Sept 1982. v. 66 (9). p. 837-839. 11 ref. (NAL Call No.: 1.9 P69P).

1018

**Resistance to root-knot nematode (*Meloidogyne incognita*) in control of root-knot nematode-*Fusarium* (*oxysporum vasinfectum*) wilt disease complex in cotton.**

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1019

**Resistance to *Verticillium albo-atrum* R. and B., in cotton, *Gossypium hirsutum* L., its inheritance and relationship to root gossypol levels.**

Williams, Curtis, 1937. Ann Arbor, Mich. University Microfilms 1971. Thesis-- University of Arkansas, 1970. vi, 126 leaves. Bibliography: leaves 64-71. (NAL Call No.: DISS 70-17,218).

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1021

**The role of insects and other plant pests in aflatoxin contamination of corn, cotton, and peanuts--a review (*Aspergillus* species, feed and food contaminants, vectors).**

Widstrom, N.W. Madison, American Society Of Agronomy. Journal of environmental quality. Jan/Mar 1979. v. 8 (1). p. 5-11. ill. 62 ref. (NAL Call No.: QH540.J6).

1022

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DeVay, J.E. Garber, R.H.; Matheron, D. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1982. v. 66 (2). p. 151-154. Includes 14 ref. (NAL Call No.: 1.9 P69P).

1023

**Screening and evaluation methods: resistance of cotton to seedling pathogens and seed deterioration (Mainly fungi and bacteria caused).**

Halloin, J.M.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 12-16. Includes references. (NAL Call No.: 100 G29S0).

1024

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Howell, C.R.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 17-18. Includes references. (NAL Call No.: 100 G29S0).

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Klich, M.A.UJASD. Lee, L.S. Champaign : The Society. Journal of the American Oil Chemists' Society. Dec 1982. v. 59 (12). p. 545. 5 ref. (NAL Call No.: 307.8 J82).

1026

**Selection of pathogenic strains of Verticillium dahliae and their influence on the useful life of cotton cultivars in the field (Gossypium hirsutum).**

Ashworth, L.J. Jr.PHYTAJ. Galanopoulos, N.; Galanopoulou, S. St. Paul : American Phytopathological Society. Phytopathology. Dec 1983. v. 73 (12). p. 1637-1639. Includes references. (NAL Call No.: 464.8 P56).

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**Soil solarization: Effects on verticillium wilt of cotton and soilborne populations of Verticillium dahliae, Pythium spp., Rhizoctonia solani, and Thielaviopsis basicola.**

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1028

**Suppression of Pythium ultimum-induced damping-off of cotton seedlings by Pseudomonas fluorescens and its antibiotic, pyoluteorin (Biological control).**

Howell, C.R. AR-S0. Stipanovic, R.D. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1980. v. 70 (8). p. 712-715. ill. 7 ref. (NAL Call No.: 464.8 P56).

1029

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Curl, E.A. Harper, J.D. Auburn, The Station. Highlights of agricultural research. Alabama. Agricultural Experiment Station. Summer 1979. v. 26 (2). p. 14. ill. (NAL Call No.: 100 AL1H).

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1031

**Symptomatology and formation of microsclerotia in weeds inoculated with Verticillium dahliae (cause of wilt) from cotton.**

Johnson, W.M. Johnson, E.K.; Brinkerhoff, L.A. St. Paul, Minn., American Phytopathological Society. Phytopathology. Jan 1980. v. 70 (1). p. 31-35. ill. 26 ref. (NAL Call No.: 464.8 P56).

1032

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Davis, Robert Gene, 1932. 1970. Thesis (Ph.D.)--Louisiana State University and Agricultural and Mechanical College, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. x, 81 leaves ; 21 cm.

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1033

**Temperature X water potential interactions on growth and sclerotial germination of *Phymatotrichum omnivorum* (Root rot of cotton).**  
Stapper, M.F. Lyda, S.D.; Jordan, W.R. St. Paul, Minn. : American Phytopathological Society. *Phytopathology*. May 1984. v. 74 (5). p. 509-513. Includes references. (NAL Call No.: 464.8 P56).

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**Testing fungicides for cottonseed treatment.**  
Sterne, R.E. Dallas. The Cotton gin and oil mill press. Apr 8, 1978. v. 79 (7). p. 22. (NAL Call No.: 304.8 C822).

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**Testing of cotton varieties on wilt (*Fusarium* and *Verticillium*)--rootknot nematode infested soil.**  
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**Transient charge transfer in living plants undergoing electrostatic spraying (Cotton, leaf wilt, drought stress, pesticides).**  
Lane, M.D. TAAEA. Law, S.E. St. Joseph : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1982. v. 25 (5). p. 1148-1153, 1159. ill. 10 ref. (NAL Call No.: 290.9 AM32T).

1037

**An unusual tropical powdery mildew (*Brasiliomyces malachrae*, description, comparison with other powdery mildews, parasite of cultivated and wild cottons, *Gossypium barbadense*, *Gossypium hirsutum* and *Gossypium purpurascens*).**  
Hanlin, R.T. Tortolero, D. Bronx, N.Y. : The New York Botanical Garden. *Mycologia*. May/June 1984. v. 76 (3). p. 439-442. ill. Includes references. (NAL Call No.: 450 M99).

1038

**Vertical distribution in soil of and induction of disease by strands of *Phymatotrichum omnivorum* (Soilborne pathogen, cotton (*Gossypium*)).**  
Alderman, S.C. Hine, R.B. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Apr 1982. v. 72 (4). p. 409-412. Includes 16 ref. (NAL Call No.: 464.8 P56).

1039

***Verticillium* (*dahliae*) wilt disease of cotton: influence of inoculum density in the field.**  
Ashworth, L.J. Jr. Huisman, O.C. St. Paul, American Phytopathological Society. *Phytopathology*. May 1979. v. 69 (5). p. 483-489. ill. 14 ref. (NAL Call No.: 464.8 P56).

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Dlsen, M.W. PHYTA. Misaghi, I.J.; Goldstein, D.; Hine, R.B. St. Paul : American Phytopathological Society. *Phytopathology*. Feb 1983. v. 73 (2). p. 213-216. 16 ref. (NAL Call No.: 464.8 P56).



# PLANT DISEASES - BACTERIAL

1041

**Bacterial blight of cotton: techniques and procedures for breeding resistant or immune cultivars** (*Gossypium* spp., *Xanthomonas malvacearum*).  
Sappenfield, W.P.SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 6-8. Includes references. (NAL Call No.: 100 G29S0).

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**Bacterial blight of cotton under conditions of artificial inoculation by Richard Weindling.**  
Weindling, Richard. Washington, D.C. U.S. Dept. of Agriculture 1948. 59 p., 8 leaves of plates : ill. -. Bibliography: p. 33-34. (NAL Call No.: Fiche S-69 no.956).

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**beta-N-acetylglucosaminidase hydrolysis of lipopolysaccharide from *Xanthomonas malvacearum* in the cotton plant (Bacterial blight, *Gossypium hirsutum*).**  
Yi, C.K.PDASA. Ardmore : The Academy. Proceedings of the Oklahoma Academy of Science. 1981. v. 61. p. 36-40. Includes references. (NAL Call No.: 500 OK42).

1044

**Chemical structure and inhalation toxicity of lipopolysaccharides from bacteria on cotton (*Agrobacterium* and *Xanthomonas*, *Pseudomonas putida*, *Enterobacter agglomerans*, and *Klebsiella oxytoca*).**  
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Howell, Charles R. (Charles Roger), 1935. Washington, D.C. U.S. Dept. of Agriculture Springfield, Va. available from the National Technical Information Service 1980. "PB80-214729. -"This government owned invention available for U.S. licensing and, possibly, for foreign licensing, PAT-APPL-6-163 850.". i, 23 leaves ; 28 cm. (NAL Call No.: SB608.C8H6).

1046

**Cotton boll rot (Mostly *Fusarium*, *Xanthomonas malvacearum*).**  
Crawford, J.L. Athens, Ga., The Service. Leaflet - Cooperative Extension Service, University of Georgia. Jan 1982. Jan 1982. (143). 4 p. ill. (NAL Call No.: 275.29 G29L).

1047

**Cotyledon and leaf ultrastructure of a bacterial blight-immune cotton line inoculated with a low level of *Xanthomonas campestris* pv. *malvacearum* (*Gossypium hirsutum*).**  
Al-Mousawi, A.H. Richardson, P.E.; Essenberg, M.; Johnson, W.M. St. Paul, Minn., American Phytopathological Society. Phytopathology. Sept 1982. v. 72 (9). p. 1230-1234. ill. 13 ref. (NAL Call No.: 464.8 P56).

1048

**Development of immunity to bacterial blight of cotton and its implications for other diseases (*Xanthomonas campestris malvacearum*, *Gossypium hirsutum*, breeding program combining single-gene resistance factors onto a polygenic resistance background).**  
Brinkerhoff, L.A. Verhalen, L.M.; Johnson, W.M.; Essenberg, M.; Richardson, P.E. St. Paul, American Phytopathological Society. Plant disease. Feb 1984. v. 68 (2). p. 168-173. ill. Includes references. (NAL Call No.: 1.9 P69P).

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Morey, P.R. Fischer, J.U.; Sasser, P.E. Memphis, National Cotton Council. Proceedings - Beltwide Cotton Production Research Conference. 1980. 1980. p. 68-69. 6 ref. (NAL Call No.: SB249.N6).

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Ruyack, J. Downing, M.R.; Chang, J.S.; Mitchell, E.D. Jr. Rockville, Md., The Association. In vitro; journal of the Tissue Culture Association. Tissue Culture Association. May 1979. v. 15 (5). p. 368-373. ill. 22 ref. (NAL Call No.: QH585.A1I58).

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1051

**Identification and effects on *Xanthomonas campestris* pv. *malvacearum* of two phytoalexins from leaves and cotyledons of resistant cotton (*Gossypium hirsutum*, blight).**  
Essenberg, M. PHYTA. Doherty, M. d'A.; Hamilton, B.K.; Henning, V.T.; Cover, E.C.; McFaul, S.J.; Johnson, W.M. St. Paul : American Phytopathological Society. Phytopathology. Oct 1982. v. 72 (10). p. 1349-1356. ill. 31 ref. (NAL Call No.: 464.8 P56).

1052

**Influence of *Gossypium* cytoplasm on expression of bacterial blight (Cotton breeding and genetics, cultivars, *Xanthomonas malvacearum*).**  
Mahill, J.F. RRMSD. Jenkins, J.N.; Meredith, W.R. Jr.; Meyer, V. Mississippi State : The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Oct 1982. v. 7 (17). 3 p. Includes references. (NAL Call No.: S79.E37).

1053

**Influence of *Gossypium* cytoplasm on expression of bacterial blight (Cotton, *Xanthomonas malvacearum*).**  
Mahill, J.F. Jenkins, J.N.; Meredith, W.R. Jr.; Meyer, V. Mississippi State, Miss. : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Jan 1984. v. 47 (1). p. 7-8. Includes references. (NAL Call No.: 100 M69MI).

1054

**Linkage relationships between the B4 gene for bacterial blight resistance and genes for pollen color, lint percentage and seedling traits in *Gossypium hirsutum* L. / by Mohamed-Aly Fathalla Tayel.**  
Tayel, Mohamed-Aly Fathalla, 1930. 1972. Thesis (Ph.D.)--Texas A&M University, 1972. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. 53 leaves ; 21 cm. Bibliography: leaves 50-52. (NAL Call No.: DISS 72-24,338).

1055

**Localized bacteriostasis indicated by water dispersal of colonies of *Xanthomonas malvacearum* within immune cotton leaves.**  
Essenberg, M. Hamilton, B. London. Academic. Physiological plant pathology. July 1979. v. 15 (1). p. 69-77. ill., 5 plates. 13 ref. (NAL Call No.: SB599.P45).

1056

**A new toxin isolated from *Xanthomonas malvacearum* which inhibits mitochondrial ATP-ADP translocase (Cotton blight disease).**  
Pandian, S.K. Somasundaram, T.; Jayaraman, J.; Lakshmanan, M. New York, Academic Press. Archives of biochemistry and biophysics. July 1982. v. 216 (2). p. 768-770. ill. 16 ref. (NAL Call No.: 381 AR2).

1057

**Occurrence of cotton fiber contaminated by *Aerobacter cloacae* by Francis E. Clark, Ralph J. Hervey, and Lester M. Blank.**  
Clark, F. E. (Francis Eugene), 1910. Washington, D.C. U.S. Dept. of Agriculture 1947. 28 p. : maps -. Bibliography: p. 27-28. (NAL Call No.: Fiche S-69 no.935).

1058

**Physical and chemical changes produced in bleached cotton duck by *Chaetomium globosum* and *Spirochaeta cytophaga* by Ruth Elmquist Rogers, Helen G. Wheeler, and Harry Humfield.**  
Rogers, Ruth Elmquist. Washington, D.C. U.S. Dept. of Agriculture 1940. 35 p., 2 leaves of plates : ill. -. Bibliography: p. 33-35. (NAL Call No.: Fiche S-69 no.726).

1059

**Relationships between seedborne microorganisms and cotton seedling emergence (Cultivars, fungi, bacteria, seed quality).**  
Davis, R.G. Mississippi State : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. June 1983. v. 46 (6). p. 7-8. Includes references. (NAL Call No.: 100 M69MI).

1060

**Screening and evaluation methods: resistance of cotton to seedling pathogens and seed deterioration (Mainly fungi and bacteria caused).**  
Holloin, J.M. SCSBA. Mississippi State : Mississippi Agricultural and Forestry Experiment Station. Southern cooperative series bulletin. Apr 1983. Information assembled for Regional Research Project S-155. Apr 1983. (280). p. 12-16. Includes references. (NAL Call No.: 100 G29S0).

1061

**Single cell colonies of *Xanthomonas malvacearum* in susceptible and immune cotton leaves and the local resistant response to colonies in immune leaves.**

Essenberg, M. Cason, E.T. Jr. London, Academic. Physiological plant pathology. July 1979. v. 15 (1). p. 53-68. ill., 3 plates. 40 ref. (NAL Call No.: SB599.P45).

1062

**Specificity of the envelopment of bacteria and other particles in cotton cotyledons (*Xanthomonas campestris* pv. *malvacearum*, blight, *Gossypium hirsutum*).**

Al-Mousawi, A.H. PHYTA. Richardson, P.E.; Essenberg, M.; Johnson, W.M. St. Paul : American Phytopathological Society. Phytopathology. Mar 1983. v. 73 (3). p. 484-489. ill. Includes references. (NAL Call No.: 464.8 P56).

1063

**Ultrastructural studies of a compatible interaction between *Xanthomonas campestris* pv. *malvacearum* and cotton (*Gossypium hirsutum*, bacterial blight).**

Al-Mousawi, A.H. Richardson, P.E.; Essenberg, M.; Johnson, W.M. St. Paul, Minn., American Phytopathological Society. Phytopathology. Sept 1982. v. 72 (9). p. 1222-1230. ill. 25 ref. (NAL Call No.: 464.8 P56).

# PLANT DISEASES - VIRAL

1064

**Agricultural oral history interview with Stuart D. Lyda and Earl Burnett / with the direction of Irvin M. May.**

Lyda, Stuart D. (Stuart Davisson). Burnett, Earl.; Lewis, R. D.; May, Irvin M.; 1939. College Station, Tex. Texas A & M University Archives 1976. Interview conducted on June 24, 1976 by R.D. Lewis and Irvin M. May of the Texas Agricultural Experiment Station, on the subject cotton root rot investigations. 34 leaves ; 28 cm. (NAL Call No.: R SB608.C8L9).

1065

**Geminate particles associated with cotton leaf crumple disease in Arizona (Cotton virus, Bemisia hirsutum as disease vector).**

Brown, J.K. Nelson, M.R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1984. v. 74 (8). p. 987-990. ill. Includes 32 references. (NAL Call No.: 464.8 P56).

1066

**Increasing the effectiveness of Heliothis nuclear polyhedrosis virus in cotton fields / by Gordon Louis Andrews.**

Andrews, Gordon Louis. Ann Arbor, Mich. University Microfilms 1973. Thesis--Mississippi State University, 1972. Facsimile produced by microfilm-xerography. vi, 44 leaves. Bibliography: leaves (42)-44. (NAL Call No.: DISS 73-13,615).

1067

**A leafhopper-transmitted virus of cotton (Cotton leaf crumple virus).**

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cottons carrying combinations of resistance  
characters / F.D. Wilson, R.L. Wilson, and B.W.  
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# ANIMAL ECOLOGY

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**A comparison of sweepnet, absolute, and insectovac sampling methods in cotton ecosystems.**

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