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**Environmental Gradients
of
Potential Rangeland Vegetation
in the
Interior Pacific Northwest**
A Chart Book

Volume 3
Natural Heritage Program
ELCODEs

by:

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Range Conservationist

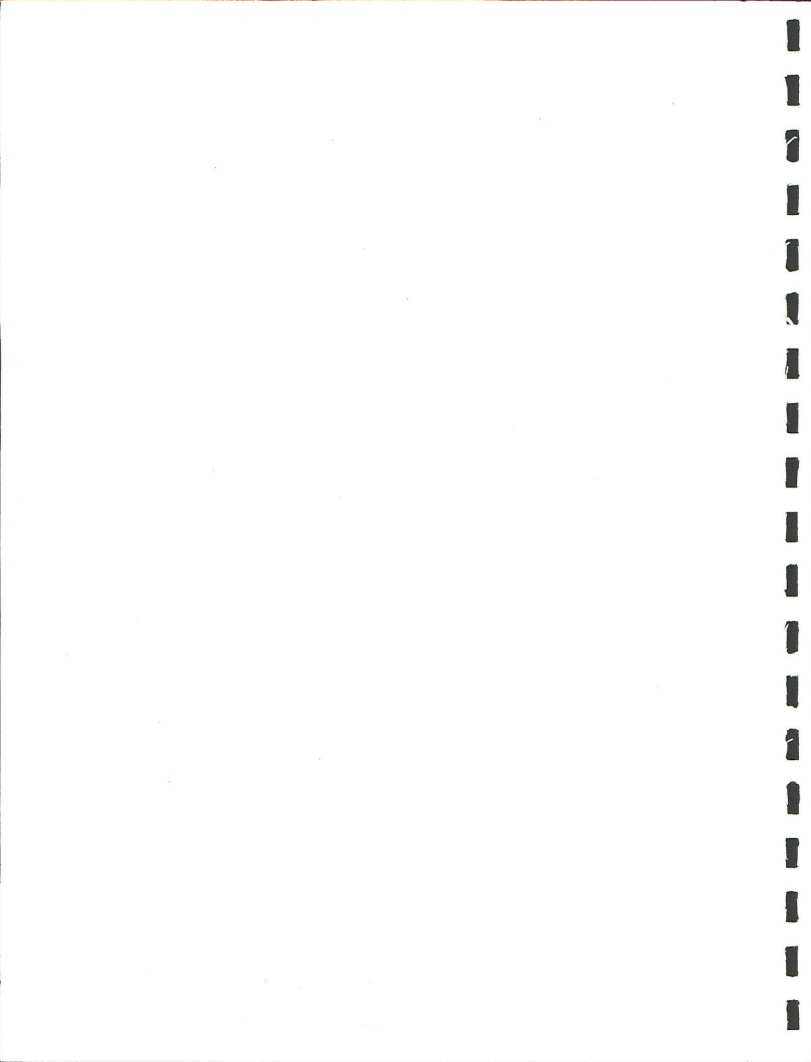
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Natural Heritage Program ELCODEs

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No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual use or aggregate use with other data.

INTRODUCTION

This report presents a series of graphs representing environmental gradients of most potential rangeland vegetation types found in the interior Pacific Northwest. The specific area of coverage includes all of Land Resource Region B and those portions of Land Resource Region D that are included within the states of Oregon and Idaho (Natural Resource Conservation Service 1981).

The report comes in five volumes with environmental gradients for each of five different classification systems as follows:

- Volume 1 Compiled by Interior Columbia Basin Ecosystem Management Project (ICBEMP) Potential Vegetation Types.
- Volume 2 Compiled by Society of American Foresters (SAF) Forest Cover Types (Eyre 1980) and Society for Range Management (SRM) Rangeland Cover Types (Shiflet 1994)
- Volume 3 Compiled by Natural Heritage Program (NHP) ELCODEs (Bourgeron and Engelking 1994, Kagan and others 1996)
- Volume 4 Compiled by Series
- Volume 5 Compiled by Association

Gradients are presented for each of the following environmental factors:

- Precipitation
- Frost Free Period
- Soil Temperature Regime
- Soil Depth
- Soil Texture
- Elevation
- Slope and Aspect

One graph per environmental factor is presented for each of the following levels of compilation:

- Combined Report Area (1)
- Each Land Resource Region (2)
- Each Major Land Resource Area (12)

The gradients were compiled from information provided in **Range Site Descriptions**.

"A range site is a distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community. A range site is the product of all the environmental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differs from that of other range sites in the kind or proportion of species or in total production" and "The natural plant community of a range site in the absence of abnormal disturbances and physical site deterioration is the climax plant community for that site (original and natural potential are acceptable synonyms for climax). It is the total plant community that is best adapted to the unique combination of environmental factors. It should be the plant community that is in dynamic equilibrium with the environment. Such natural disturbances as drought, wild fires, grazing of native fauna, and insects are inherent in the development of any native plant community. Plant communities that are protected from these natural influences for long periods do not always typify the climax vegetation" (Natural Resource Conservation Service 1976).

A range site may be viewed as a phase of a habitat type.

"The habitat type is defined as the aggregate areal extent of a plant association that an area supports or is capable of again supporting (Daubenmire 1952). Although not stated in specific terms, the range site classification is also a land classification based on the plant association that is constrained by levels of productivity (Dyksterhuis 1949; Shiflet 1973). The added constraint of productivity makes the range site a more homogeneous land unit in terms of uniformity in species abundance and soils than the habitat type" (Hironaka 1987).

Range sites are identified and described in conjunction with the National Cooperative Soil Survey. Proposed range site descriptions are then reviewed, correlated, and approved by the State Rangeland Conservationists of the Natural Resource Conservation Service (formerly Soil Conservation Service).

Three hundred seventy-six range site descriptions from Oregon (256), Washington (48), and Idaho (72) were reviewed and entered into a database table (OAESIS database under development) in the summer and fall of 1995. This included all approved range site descriptions for Oregon; Oregon descriptions proposed in conjunction with the Harney county Ecological Site Inventory (ESI); Washington descriptions for all soil phases identified in BLM ESIs; and Idaho descriptions for all BLM lands included in "subsample watersheds" evaluated during the ICBEMP mid-scale exercise. While not totally complete, most major types should be adequately represented for the report area.

During that review, each range site description was also classified under each of the five classification systems used in this report.

Unfortunately, vegetation classification is not an exact science. Many range sites can quite legitimately be placed in more than one class. The groupings that have been made represent the author's effort to place each range site into the "best fit" class consistent with the purpose and assumptions of each of the classification systems. One of the primary purposes of the ICBEMP classification, for example, is to group lands by similar successional dynamics for modeling with the Vegetation Dynamics Development Tool (Beukema and Kurz 1995). Therefore, site behavior was afforded some preference over floristic composition when range sites were assigned to this classification system. The written discussions were used for guidance in assigning range sites to the SAF and SRM systems. Assignments to the NHP classifications were made more on the basis of an association concept.

Series and Association were handled as a natural classification with an open legend and a set of rules. Associations were classified strictly on the basis of a single dominant tree, shrub, and herb on the basis of composition (not height). In addition, no layer was included in a class unless that lifeform comprised at least 10% of the composition. Even with these rules, some flexibility was applied to control the number of classes. Bluebunch wheatgrass and Idaho fescue, for example, frequently occur together in more or less co-dominance. Range sites in this situation were assigned to an Idaho fescue association only if the site description indicated that the amounts of bluebunch wheatgrass were minor. As an illustration, a basin big sagebrush site description specifying 30-60% Idaho fescue and 15-30% bluebunch wheatgrass would have been assigned to the **basin big sagebrush/bluebunch wheatgrass** association. The dominant species in the tallest layer in the association name is the **Series**.

The graphs that present the environmental gradients show an "optimum" range and a "marginal" range. These were calculated by compiling the minimums and maximums from the range site data. Optimum was then calculated as the range from the average of minimums to the average of maximums. Marginal was calculated as one-half of the range from the average of minimums to the minimum of minimums, and as one-half of the range from the average of maximums to the maximum of maximums. Given three range site descriptions in a set with elevations as follows:

Site A	1000	to	2000
Site B	2000	to	3000
Site C	1500	to	2500

The average of minimums is 1500 and the average of maximums is 2500, so "optimum" is 1500 to 2500. The minimum of minimums is 1000, so "marginal" on the minimum side is 1250 to 1500. The maximum of maximums is 3000, so "marginal" on the maximum side is 2500 to 2750.

Using this approach, there is no marginal range calculated for classes that included only one site description, or where multiple descriptions specified exactly the same range. Also, not all site descriptions provided information for all seven factors evaluated. Therefore, the number of range site descriptions that were used to make the gradient calculations are shown in parenthesis for each class on each graph.

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- Shiflet, T.N., ed. 1994. Rangeland cover types of the United States. Society for Range Management. Denver, CO. 152pp.
- In addition to the above, the range site descriptions listed in the "Legend and Range Site Groupings" section that follows are incorporated as references.

Note: It was discovered just as this volume was going to reproduction that the ELCODEs used are now obsolete. Conversion to the new ELCODEs is provided in the ERRATA on page 160.

LEGEND and RANGE SITE GROUPINGS
by
NATURAL HERITAGE PROGRAM ELCODE

CPSA1SBSC1	Booth willow-Geyer willow/widefruit sedge
006XB102OR	1989 COLD WET MEADOW
CPSA1SESE1	coyote willow/basin wildrye
010XY006OR	1990 MOUNTAIN LOAMY BOTTOM
012XY023ID	1979 SEMIWET MEADOW - CAREX
CPSA1RSO1	rigid willow-golden currant-Woods rose
010XY012OR	1990 MOUNTAIN BRAIDED BOTTOM
CPXA1PTC02	black cottonwood/black hawthorn riparian
010XY011OR	1990 GRAVELLY BRAIDED BOTTOM
CPXA1PTS02	black cottonwood/coyote willow riparian
010XY005OR	1990 LOAMY BOTTOM
011XY001OR	1991 LOAMY BOTTOM
CPXA1PTSE1	quaking aspen/snowberry/blue wildrye
006XB100OR	1989 WET MEADOW
021XY416OR	1989 ASPEN GROVE
023XY418OR	prop ASPEN GROVE
CTCFASSA01	spiny hopsage-greasewood/indian ricegrass
024XY005OR	1986 SODIC DUNES
CTCFATAA01	saltbush-greasewood dunes
011XY010OR	1991 SILTY 6-9 PZ
024XY012OR	1986 SANDY 6-10 PZ
CUBBPP00C2	ponderosa pine/elk sedge
043XY013OR	prop FIR - PINE - SEDGE

CUBBPP00F1	ponderosa pine/Idaho fescue		
	043XY006WA	1989	UPLAND 15-18 PZ
CUBBPP0A03	ponderosa pine/greenleaf manzanita-bitterbrush		
	006XB204OR	1989	PINE-BITTERBRUSH-MANZANITA-FESCUE
CUBBPP0C01	ponderosa pine/snowbrush-bitterbrush		
	006XB206OR	1989	PINE-BITTERBRUSH-SNOWBRUSH-FESCUE
CUBBPP0C02	ponderosa pine/mountain mahogany		
	010XC080OR	1990	MAHOGANY MOUNTAIN LOAM 14-18 PZ
	021XY402OR	1989	ROCKY RIDGES 14+ PZ
CUBBPP0PA1	ponderosa pine/bitterbrush/bluebunch wheatgrass		
	010XB046OR	1990	SHRUBBY MOUNTAIN SOUTH 12-16 PZ
CUBBPP0PF1	ponderosa pine/bitterbrush/Idaho fescue		
	006XB202OR	1989	PONDEROSA PINE-FESCUE
	010XB028OR	1990	SHRUBBY MOUNTAIN CLAYEY 12-16 PZ
	010XB071OR	1990	SHRUBBY MOUNTAIN NORTH 12-16 PZ
	010XC082OR	1990	DRY PINE 14-16 PZ
	021XY410OR	1989	DEEP LOAMY 16-20 PZ
	021XY414OR	1989	PONDEROSA PINE-FESCUE
	043XY010OR	prop	PINE - BITTERBRUSH
CUBBPP0S02	ponderosa pine/common snowberry		
	043XY012OR	prop	PINE - SNOWBERRY
CUBBPP0S03	ponderosa pine/mountain snowberry		
	006XY017WA	1983	LOAMY 20-45 PZ DROUGHTY
CUCBPPPP02	ponderosa pine-Douglas fir/bitterbrush		
	006XA304OR	1989	LOAMY 20-40 PZ
CUCBPPPS01	ponderosa pine-Douglas fir/snowberry		
	043XY007WA	1989	LOAMY UPLAND 15-20 PZ

CUGBJO0AA2	western juniper/big sagebrush/bluebunch wheatgrass		
	025XY013ID	1980	JUNIPER SAVANNA 10-14 PZ
CUGBJO0AA3	western juniper/big sagebrush-bitterbrush/bunchgrass		
	025XY017ID	1981	SHALLOW BREAKS 10-18 PZ
CUGBJO0AF1	western juniper/low sagebrush/Idaho fescue		
	023XY217OR	prop	JUNIPER TABLELAND 12-16 PZ
CUGBJO0AP1	western juniper/stiff sagebrush/Sandberg bluegrass		
	010XC040OR	1990	MOUNTAIN VERY SHALLOW 16-20 PZ
CUGBJO0CA1	western juniper/curleaf mountain-mahogany rimrock & canyons		
	010XC059OR	1990	MAHOGANY ROCKLAND 12+ PZ
CUGBJO0PA1	western juniper/bitterbrush/bluebunch wheatgrass-Idaho fescue		
	010XB045OR	1990	JD CLAYEY SOUTH 12-16 PZ
CUGBJO0PA1	western juniper-ponderosa pine/bitterbrush/bunchgrass		
	006XB200OR	1989	PINE-JUNIPER-BITTERBRUSH-FESCUE
CUKCPPR01	ponderosa pine-Oregon white oak/poison oak-snowberry		
	006XA100OR	1989	SANDY BOTTOM
CUKCPPQ01	ponderosa pine-Oregon white oak/bitterbrush		
	006XA200OR	1989	SOUTH SLOPES 14-20 PZ
	006XA202OR	1989	NORTH SLOPES 14-20 PZ
	006XA300OR	1989	LOAMY 14-20 PZ
	006XA302OR	1989	STEEP SOUTH SLOPES 20-40 PZ
CUSAPT0A01	quaking aspen/serviceberry-chokecherry		
	021XY412OR	1989	LOAMY 18+ PZ
	025XY030ID	1981	MOUNTAIN BRUSH 18-22 PZ
CUUACD0S01	black hawthorn/common snowberry		
	009XY014OR	1989	DEEP LOAM 17-22 PZ
	009XY041OR	1989	DEEP NORTH 14-17 PZ

	009XY046OR	1989	DEEP NORTH 17-24 PZ
CUYDCL0CA1	curlleaf mountain mahogany/bluebunch wheatgrass		
	010XB057OR	1990	JD MAHOGANY ROCKLAND 9-12 PZ
	010XC058OR	1990	GREASEBUSH-MAHOGANY ROCKLAND 9-12 PZ
	012XY015ID	1979	STEEP LIMESTONE 13-16 PZ
CUYDCL0CA2	mountain mahogany/bluebunch wheatgrass-Idaho fescue		
	023XY408OR	1988	ROCKY RIDGES 12-16 PZ
	023XY510OR	prop	UNKNOWN
CVCFP0PA1	bitterbrush/bluebunch wheatgrass		
	008AY017WA	1985	SANDY 12-15 PZ
	008AY019WA	1986	SHALLOW SOUTH EXPOSURE 12-15 PZ
	008AY021WA	1987	STONY NORTH EXPOSURE 12-15 PZ
	008AY034WA	1988	SHALLOW LOAM 9-12 PZ
	021XY206OR	1989	DEEP LOAMY 10-14 PZ
CVCFP0PA2	bitterbrush/bluebunch wheatgrass-Idaho fescue		
	006XY001WA	1981	LOAMY 18+ PZ
	008AY010WA	1986	SANDY LOAM 9-12 PZ
	009XY029OR	1989	SOUTH 14-17 PZ
	010XB027OR	1990	JD CLAYEY 12-16 PZ
	010XC034OR	1990	SHRUBBY MOUNTAIN LOAM 16-20 PZ
	010XY003ID	1979	LOAMY 16-20 PZ
	021XY200OR	1989	LOAMY 10-14 PZ
	021XY202OR	1989	SHALLOW LOAM 10-14 PZ
	021XY210OR	1989	LOAMY 14-18 PZ
	021XY212OR	1989	SHALLOW LOAM 14-18 PZ
	021XY312OR	1989	NORTH SLOPES 14-18 PZ
	023XY210OR	1988	PUMICE 10-12 PZ
	025XY034OR	1991	NORTH SLOPES 13-16 PZ
CVCFP0PS1	bitterbrush/needle-and-thread		
	007XY011OR	1986	SANDS 8-10 PZ
	008AY011WA	1987	SANDY 9-12 PZ
	010XC056OR	1990	TERRACE ESCARPMENT 9-12 PZ
	011XY024OR	1991	SHRUBBY ESCARPMENT 9-11 PZ
	013XY027ID	1981	SAND 12-16 PZ

CVCFTPOPA1 ERROR - should read CVCFTOPA1

CVCFTPOPA2 ERROR - should read CVCFTOPA2

CVDFATOAA1 ERROR - should read CVDFATOAA2

CVDFATOAA2 basin big sagebrush/bluebunch wheatgrass-Sandberg bluegrass

008AY005WA	1987	CALCAREOUS LOAM 9-12 PZ
008AY018WA	1985	SOUTH EXPOSURE 12-15 PZ
008XY001WA	1981	SHALLOW STONY 9-12 PZ
008XY003WA	1981	NORTH EXPOSURE 9-12 PZ
008XY007WA	1981	NORTH EXPOSURE 12-15 PZ
008XY110OR	1987	LOAMY 10-12 PZ
008XY200OR	1987	SOUTH 10-14 PZ
010XB022OR	1990	JD CLAYEY 9-12 PZ
010XB042OR	1990	JD CLAYEY SOUTH 9-12 PZ
010XB051OR	1990	JD SHALLOW SOUTH 9-12 PZ
011AY003ID	1983	SHALLOW FRACTURED 8-12 PZ
011XY032OR	1991	SILTY NORTH SLOPES 9-11 PZ
021XY302OR	1989	NORTH SLOPES 10-14 PZ
023XY222OR	prop	SHALLOW LAVA 10-12 PZ
023XY301OR	prop	DROUGHTY SOUTH SLOPES 11-13 PZ
023XY301OR	PROP	DROUGHTY SOUTH SLOPES 11-13 PZ
024XY007OR	prop	DRY PONDED CLAY 6-10 PZ
025XY012OR	1991	LOAMY 11-13 PZ

CVDFATOAE1 basin big sagebrush/basin wildrye

007XY001WA	1991	LOAMY BOTTOM 6-12 PZ
007XY010OR	1986	SANDY BOTTOM
010AY022ID	1980	LOAMY 12-16 PZ
010XB016OR	1990	SWALE 12-16 PZ
010XB019OR	1990	GUMBO 9-12 PZ
010XB020OR	1990	GRAVELLY FAN 9-12 PZ
010XC013OR	1990	SWALE 9-12 PZ
010XC014OR	1990	MOUNTAIN SWALE 9-12 PZ
010XC017OR	1990	MOUNTAIN SWALE 12-16 PZ
010XC018OR	1990	SR ADOBELAND 9-12 PZ
010XC025OR	1990	GRAVELLY FAN 12-16
011XY005OR	1991	SWALE 9-11 PZ
012XY011ID	1979	ALLUVIAL BOTTOM 8-13 PZ

021XY100OR	1989	DRY FLOODPLAIN 10+ PZ
023XY009OR	prop	DRY BASIN
023XY019OR	prop	SILT LOAM TERRACE 10-12 PZ
023XY102OR	1988	SANDY BOTTOM
023XY104OR	1988	LOAMY BOTTOM
023XY202OR	prop	SWALE 10-14 PZ
023XY402OR	1988	DEEP SOUTH SLOPES 16+ PZ
023XY406OR	1988	MOUNTAIN SWALE
024XY004OR	1986	DRY FLOODPLAIN
024XY113OR	prop	SODIC FAN 6-10 PZ
025XY007OR	1991	SWALE 11-13 PZ
025XY008OR	1991	SWALE 13-16 PZ
025XY020OR	1991	SOUTH SLOPES 11-13 PZ
025XY028ID	1981	LOAMY BOTTOM 12-16 PZ

CVDFATOAF1 basin big sagebrush/Idaho fescue

006XY004WA	1985	LOAMY 15-18 PZ
010XB063OR	1990	JD NORTH 9-12 PZ
010XB070OR	1990	JD NORTH 12-16 PZ
024XY009OR	PROP	DRY BASIN
025XY024ID	1981	LOAMY UPLAND 12-16 PZ
025XY032OR	1991	NORTH SLOPES 11-13 PZ

CVDFATOAS1 basin big sagebrush/needle-and-thread

007XY025OR	1986	SANDY NORTH 8-10 PZ
008XY130OR	1987	SANDY LOAM 10-12 PZ
011AY014ID	1983	SANDY 8-12 PZ
011BY004ID	1979	SANDY 8-12 PZ
011XY014OR	1991	SANDY 6-9 PZ
011XY016OR	1991	SANDY 9-11 PZ
023XY213OR	prop	SANDY LOAM 10-12 PZ
023XY303OR	prop	SANDY SLOPES 10-12 PZ
024XY018OR	prop	SANDY LOAM 8-10 PZ
024XY110OR	prop	DUNES

CVDFAVOAA1 mountain big sagebrush/bluebunch wheatgrass

010AY009ID	1980	SOUTH SLOPE STONY 12-16 PZ
010AY020ID	1980	MIXED SHRUB 12-16 PZ
010XC047OR	1990	SR MOUNTAIN SOUTH 12-16 PZ
010XC051OR	1990	HIGH MOUNTAIN SOUTH 16-20 PZ
010XC054OR	1990	SR MOUNTAIN SHALLOW SOUTH 12-16 PZ
010XC055OR	1990	MOUNTAIN SHALLOW SOUTH 16-20 PZ
013XY001ID	1979	LOAMY 13-16 PZ
013XY008ID	1979	STEEP SLOPES 12-16 PZ
013XY028ID	1981	SHALLOW SAND 12-16 PZ

013XY047ID	1986	SHALLOW FRACTURED LOAMY 16-22 PZ
021XY308OR	1989	SOUTH SLOPES 14-18 PZ
023XY302OR	1988	SOUTH SLOPES 12-16 PZ
025XY008ID	1980	STONY NORTH SLOPE 12-16 PZ

CVDFAVOAF2 mountain big sagebrush/Idaho fescue

010AY004ID	1980	LOAMY 12-16 PZ
010AY005ID	1980	GRAVELLY LOAM 12-16 PZ
010AY008ID	1980	NORTH SLOPE LOAMY 16-20 PZ
010AY013ID	1980	NORTH SLOPE LOAMY 18-24 PZ
010AY031ID	1992	BOULDERY LOAM 12-16 PZ
010XC019OR	1990	DRY MOUNTAIN SWALE 12-16 PZ
010XC032OR	1990	SR MOUNTAIN CLAYEY 12-16 PZ
010XC033OR	1990	SR MOUNTAIN LOAMY 12-16 PZ
010XC037OR	1990	SR MOUNTAIN SHALLOW 12-16 PZ
010XC053OR	1990	HIGH MOUNTAIN LOAM 18+ PZ
010XC066OR	1990	SR MOUNTAIN NORTH 12-16 PZ
010XC067OR	1990	SHRUBBY MOUNTAIN NORTH 16-20 PZ
010XC075OR	1990	SR MOUNTAIN SHALLOW NORTH 12-16 PZ
012XY012ID	1984	LOAMY 13-16 PZ
012XY021ID	1979	LOAMY 16-22 PZ
012XY024ID	1980	SUBALPINE SLOPE LOAMY 20+
013XY023ID	1980	LOAMY 16-22 PZ
013XY031ID	1982	STEEP STONY SLOPES 16-22 PZ
023XY310OR	1988	NORTH SLOPES 12-16 PZ
023XY318OR	1988	LOAMY 12-16 PZ
023XY320OR	1988	DEEP LOAMY 12-16 PZ
023XY400OR	1988	LOAMY 16-20 PZ
023XY404OR	prop	DEEP NORTH 12-18 PZ
023XY501OR	prop	UNKNOWN
023XY502OR	prop	UNKNOWN
023XY509OR	prop	UNKNOWN
025XY012ID	1982	LOAMY 13-16 PZ
025XY014OR	1991	LOAMY 13-16 PZ
025XY022ID	1981	LOAMY 16+ PZ
025XY023ID	1981	NORTH SLOPE LOAMY 16+ PZ

CVDFAWOAA1 Wyoming big sagebrush/bluebunch wheatgrass

007XY003WA	1987	SANDY LOAM 6-9 PZ
007XY005WA	1991	LOAMY 6-9 PZ
007XY007WA	1991	SHALLOW 6-12 PZ
007XY014OR	1986	LOAMY 8-10 PZ
007XY015OR	1986	SHALLOW LOAM 8-10 PZ
007XY020OR	1986	SOUTH 8-10 PZ
008AY001WA	1987	LOAMY 9-12 PZ
008AY002WA	1986	STONY LOAM 9-12 PZ

008AYO20WA	1984	NORTH EXPOSURE 12-15 PZ
008BY001WA	1991	LOAMY 9-12 PZ
008BY002WA	1991	LOAMY NORTH EXPOSURE 9-12 PZ
008BY010WA	1991	LOAMY 12-15 PZ
008XY002WA	1991	LOAMY 9-12 PZ
008XY024WA	1983	NORTH SLOPE 9-12 PZ
008XY031WA	1986	LOAMY 12-15 PZ
010XC021OR	1990	SR CLAYEY 9-12 PZ
010XC035OR	1990	SR SHALLOW 9-12 PZ
010XC043OR	1990	SR CLAYEY SOUTH 9-12 PZ
010XC050OR	1990	SR SHALLOW SOUTH 9-12 PZ
011AY002ID	1980	SHALLOW LOAMY 8-12 PZ
011AY004ID	1981	LOAMY 8-12 PZ
011AY005ID	1978	CLAYPAN 8-12 PZ
011AY009ID	1983	LOAMY 8-12 PZ
011AY010ID	1978	CHURNING CLAY 8-12 PZ
011XY012OR	1991	SILTY 9-11 PZ
011XY020OR	1991	SOUTH SLOPES 6-11 PZ
011XY030OR	1991	SILTY NORTH SLOPES 6-9 PZ
012XY004ID	1981	GRAVELLY LOAM 8-12 PZ
012XY005ID	1982	SOUTH SLOPE GRAVELLY 11-13 PZ
012XY032ID	1983	LOAMY 8-11 PZ
023XY204OR	1988	SHALLOW LOAM 8-10 PZ
023XY220OR	1988	CLAYEY 10-12 PZ
024XY033OR	1986	NORTH SLOPES 6-10 PZ
025XY005ID	1980	LOAMY 12-16 PZ
025XY007ID	1980	SHALLOW LOAMY UPLAND 10-14 PZ
025XY010OR	1991	LOAMY 8-11 PZ
025XY019ID	1981	LOAMY 10-13 PZ
025XY024OR	1991	SHALLOW SOUTH SLOPES 11-13 PZ
025XY030OR	1991	DROUGHTY NORTH SLOPES 11-13 PZ

CVDFAWOAF1 Wyoming big sagebrush/Idaho fescue

010XC030OR	1990	SR MOUNTAIN LOAMY 9-12 PZ
010XC036OR	1990	SR MOUNTAIN SHALLOW 9-12 PZ
010XC065OR	1990	SR MOUNTAIN NORTH 9-12 PZ
023XY308OR	1988	NORTH SLOPES 10-12 PZ
025XY009ID	1980	LOAMY 12-16 PZ

CVDFAWOAP1 Wyoming big sagebrush/Sandberg bluegrass

012XY030ID	1981	LOAMY 7-10 PZ
025XY020ID	1981	LOAMY 7-10 PZ

CVDFAWOAS1 Wyoming big sagebrush/needle-and-thread

007XY004WA	1987	SANDY 6-9 PZ
007XY013OR	1986	SANDY LOAM 8-10 PZ
007XY018WA	1987	SANDS 6-9 PZ
011BY019ID	1983	LOAMY 7-10 PZ
011BY020ID	1983	SHALLOW FRACTURED 7-12 PZ

CVDFAWOAS2 Wyoming big sagebrush/Thurber needlegrass

011XY014ID	1981	SANDY LOAM 8-12 PZ
011XY018OR	1991	SHALLOW LOAM 9-11 PZ
023XY212OR	1988	LOAMY 10-12 PZ
024XY016OR	1986	LOAMY 8-10 PZ
024XY017OR	1986	SHALLOW LOAM 8-10 PZ
024XY020OR	1986	SHRUBBY LOAM 8-10 PZ
024XY030OR	1986	LOAMY SLOPES 6-10 PZ

CVDFAWOAS4 Wyoming big sagebrush/bottlebrush squirreltail

024XY008OR	prop	CLAYEY PLAYETTE
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CVDFAWPAA1 Wyoming big sagebrush-bitterbrush/bluebunch wheatgrass

008AY007WA	1988	SHALLOW STONY 9-12
008XY012WA	1981	LOAMY 12-15 PZ
010AY032ID	1992	BOULDERY 11-13
010XC020OR	1990	SR LOAMY 9-12 PZ
010XC057OR	prop	SHALLOW ESCARPMENT 9-12 PZ
021XY300OR	1989	SOUTH SLOPES 10-14 PZ
023XY300OR	1988	SOUTH SLOPES 8-12 PZ
025XY006ID	1980	STONY SOUTH SLOPE 10-13 PZ

CVDFAWPAF1 Wyoming big sagebrush-squawapple/Idaho fescue

010XC031OR	1990	SR MOUNTAIN CLAYEY 9-12 PZ
010XC064OR	1990	SR NORTH 9-12 PZ

CVDFAWPAF2 Wyoming big sagebrush-bitterbrush/Idaho fescue

021XY208OR	1989	SANDY 10-14 PZ
023XY316OR	1988	DROUGHTY LOAM 12-14 PZ

CVFANOAA1 black sagebrush/bluebunch wheatgrass

012XY001ID	1981	LIMEY GRAVELLY 8-13 PZ
013XY011ID	1979	WINDSWEPT RIDGE 12-16 PZ

CVEFANOAP1	black sagebrush/Sandberg bluegrass		
024XY021OR	1986	THIN SURFACE	8-14 PZ
CVEFATOAA1	threetip sagebrush/bluebunch wheatgrass		
010AY035ID	1992	LOAMY BASIN	11-13 PZ
012XY008ID	1979	DRY GRAVELLY	13-16 PZ
CVEFATOAF1	threetip sagebrush/Idaho fescue		
010AY023ID	1981	LOAMY	12-16 PZ
012XY010ID	1982	NORTH SLOPE LOAMY	12-16 PZ
023XY314OR	1988	GRAVELLY NORTH SLOPES	12-16 PZ
CVGFAAOAA1	low sagebrush/bluebunch wheatgrass		
010AY006ID	1985	CLAYEY	11-14 PZ
010AY038ID	1992	STONY CLAYEY	8-16 PZ
010XB029OR	prop	CLAYPAN	9-12 PZ
011BY013ID	1982	SHALLOW LOAMY	8-12 PZ
011XY013ID	1982	SHALLOW LOAMY	8-12 PZ
012XY002ID	1981	SHALLOW LOAM	12-16 PZ
013XY014ID	1979	SHALLOW STONY	12-16 PZ
021XY306OR	1989	STONY CLAYPAN SOUTH	14-18 PZ
023XY214OR	1988	CLAYPAN	10-12 PZ
023XY215OR	prop	SHALLOW GRAVELLY-LOAM	10-12 PZ
025XY017OR	1991	SHALLOW GRAVELLY LOAM	11-13 PZ
025XY026OR	1991	SHALLOW SOUTH SLOPES	13-16 PZ
CVGFAAOAF1	low sagebrush/Idaho fescue		
010XB080OR	1990	MOUNTAIN CLAYPAN	12-16 PZ
012XY025ID	1980	SHALLOW SUBALPINE	16+ PZ
021XY216OR	1989	STONY CLAYPAN	14-18 PZ
023XY216OR	1988	CLAYPAN	12-16 PZ
023XY312OR	prop	SHALLOW NORTH	12-16 PZ
023XY410OR	1988	GRAVELLY RIDGE	12-16 PZ
023XY412OR	1988	GRAVELLY RIDGE	16+ PZ
023XY504OR	prop	UNKNOWN	
023XY507OR	prop		
025XY010ID	1981	SHALLOW CLAYPAN	12-16 PZ
025XY016OR	1991	SHALLOW LOAM	11-13 PZ
025XY018OR	1991	SHALLOW LOAM	13-16 PZ
025XY038OR	1991	SHALLOW NORTH SLOPES	11-13 PZ
025ZZ003ID	1978	SHALLOW	16+ PZ

CVGFAAOAP1	low sagebrush/Sandberg bluegrass		
021XY204OR	1989	SHALLOW STONY 10+ PZ	
023XY218OR	1988	THIN SURFACE CLAYPAN 10-16 PZ	
023XY324OR	prop	SHALLOW SWALE 10-14 PZ	
CVGFAAPAA1	low sagebrush-bitterbrush/bluebunch wheatgrass-Idaho fescue		
010XB082OR	1990	SHRUBBY MOUNTAIN CLAYPAN 12-16 PZ	
021XY214OR	1989	CLAYPAN 14-18 PZ	
021XY310OR	1989	SHALLOW NORTH 14-18 PZ	
CVHFAROAA1	stiff sagebrush/bluebunch wheatgrass		
007XY006WA	1991	SHALLOW STONY 6-9 PZ	
008BY008WA	1991	THIN SHALLOW 9-12 PZ	
009XY025WA	1986	VERY SHALLOW 15-18 PZ	
009XY027OR	1989	MOUNTAIN VERY SHALLOW 13+ PZ	
CVHFAROAP1	stiff sagebrush/Sandberg bluegrass		
007XY019WA	1991	VERY SHALLOW 6-12 PZ	
008XY007WA	1981	VERY SHALLOW 9-18 PZ	
008XY150OR	1987	VERY SHALLOW 10-14 PZ	
009XY025OR	1989	VERY SHALLOW 14+ PZ	
010XC038OR	1990	SR VERY SHALLOW 9-12 PZ	
010XC039OR	1990	MOUNTAIN VERY SHALLOW 12-16 PZ	
CVIFACOAA1	silver sagebrush/slender wheatgrass-Nevada bluegrass		
021XY108OR	1989	INTERMITTENT LAKE	
023XY200OR	1988	PONDED CLAY	
025XY032ID	1982	CLAY BASIN 12-16 PZ	
025XY035ID	1981	CHURNING CLAY 12-16 PZ	
CVJFACOAS1	shadscale/bunchgrass		
011XY010ID	1981	CALCAREOUS LOAM 7-10 PZ	
024XY010OR	1986	CLAY BASIN 6-8 PZ	
024XY015OR	1986	DESERT LOAM 6-10 PZ	
024XY031OR	1986	SHALLOW SLOPES 6-10 PZ	
CVJFACAAO1	shadscale-Wyoming big sagebrush rimrock		
011XY022OR	1991	SHALLOW ESCARPMENT 6-11 PZ	

CVJFACAA02	shadscale-spiny hopsage-black greasewood	
024XY013OR	1986	SODIC FAN 6-10 PZ
024XY014OR	1986	SODIC TERRACE 6-10 PZ
CVJFATAAS1	mountain big sagebrush-spiny hopsage-green mormon tea/gray-ball sage	
024XY032OR	1986	SOUTH SLOPES 6-10 PZ
CVJFELOE01	winterfat/Sandberg bluegrass	
007XY020WA	1983	CALCAREOUS LOAM 6-9 PZ
024XY011OR	1986	SILTY 6-10 PZ
CVJFSVOSD1	black greasewood/inland saltgrass	
010XY008OR	1990	SODIC MEADOW
021XY104OR	1989	SALINE MEADOW
024XY001OR	1986	SODIC FLAT
024XY002OR	1986	SODIC MEADOW
024XY112OR	PROP	DRY SODIC FLOODPLAIN
024XY114OR	PROP	SODIC LAKE TERRACE
CVJFSVOSE1	black greasewood/basin wildrye	
010XY007OR	1990	SODIC BOTTOM
011XY003OR	1991	SODIC BOTTOM
021XY102OR	1989	SODIC FLAT 10+ PZ
024XY003OR	1986	SODIC BOTTOM
CVMFGNOGA1	spiny greenbush/bluebunch wheatgrass	
010XC044OR	1990	SOUTH SCHIST 9-12 PZ
010XC052OR	1990	SHALLOW SOUTH SCHIST 9-12 PZ
CVMFPEOPA1	bitter cherry/bluebunch wheatgrass	
010XC049OR	1990	SHRUBBY MOUNTAIN SOUTH 16-20 PZ
CVMFWSR01	Wood rose-common snowberry	
009XY030OR	1989	SOUTH 17-22 PZ
009XY040OR	1989	NORTH 14-17 PZ
009XY043OR	1989	LOW ELEVATION DEEP NORTH 14-17 PZ
009XY045OR	1989	NORTH 17-24 PZ
009XY048OR	1989	SHALLOW NORTH 17-24 PZ

CVQFV00VE1 bog blueberry/few-flowered spikerush
023XY100OR 1988 LAKEBED

CVSGCN00C2 Nebraska sedge meadow
024XY117OR PROP BASIN WET MEADOW

CVSGCNC0C1 black alpine sedge-Holm sedge-tufted hairgrass meadow
010XY001OR 1990 WET MOUNTAIN MEADOW
010XY003OR 1990 WET MEADOW

CVSGDC00D1 tufted hairgrass montane meadow
010XY002OR 1990 MOUNTAIN MEADOW
010XY004OR 1990 MEADOW
021XY406OR 1989 WET MEADOW
023XY416OR 1988 WET MEADOW
043XY005WA 1985 WET MEADOW - HAIRGRASS

CVTGFI00F1 Idaho fescue subalpine grassland
023XY503OR PROP OPEN SLOPES 25-35 PZ
023XY505OR PROP SUBALPINE THIN SURFACE 35-40 PZ

CVTGPC00P1 Cusick bluegrass meadow
025ZZ004ID 1982 SEMI-WET MEADOW

CVTGPN00P1 Nevada bluegrass meadow
023XY414OR 1988 DRY MEADOW
024XY118OR PROP BASIN DRY MEADOW
025XY004OR 1991 DRY MEADOW

CVUGASFOA1 bluebunch wheatgrass-Idaho fescue canyon
006XA204OR 1989 SOUTH SLOPES 20-40 PZ
008XY220OR 1987 NORTH 10-14 PZ
009XY031OR 1989 SHALLOW SOUTH 14+ PZ
009XY034OR 1989 MOUNTAIN SOUTH 13-17 PZ
009XY035OR 1989 MOUNTAIN SOUTH 17-24 PZ
009XY036OR 1989 MOUNTAIN SHALLOW SOUTH 13+ PZ
009XY042OR 1989 LOW ELEVATION NORTH 14-17 PZ

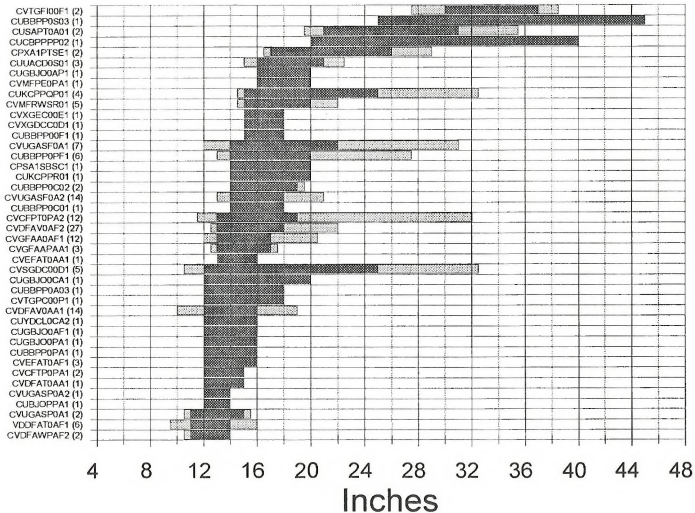
CVUGASF0A2	bluebunch wheatgrass-Idaho fescue prairie		
008AY013WA	1985	LOAMY 12-15 PZ	
008XY017WA	1986	SANDY LOAM 12-15 PZ	
008XY018WA	1984	LOAMY 12-15 PZ	
008XY120OR	1987	LOAMY 12-14 PZ	
009XY010OR	1989	LOAMY 14-17 PZ	
009XY013OR	1989	LOAMY 17-22 PZ	
009XY015OR	1989	CLAYEY 14-17 PZ	
009XY016OR	1989	CLAYEY 17-22 PZ	
009XY017OR	1989	MOUNTAIN LOAMY 13-17 PZ	
009XY018OR	1989	MOUNTAIN LOAMY 17-24 PZ	
009XY020OR	1989	SHALLOW CLAYEY 14-17 PZ	
009XY021OR	1989	SHALLOW CLAYEY 17-22 PZ	
009XY022OR	1989	MOUNTAIN SHALLOW 13+ PZ	
043XY019WA	1990	LOAMY 15-20 PZ	
CVUGASPOA1	bluebunch wheatgrass-Sandberg bluegrass lithosol		
008XY028WA	1986	SHALLOW STONY 12-16 PZ	
008XY210OR	1987	SHALLOW SOUTH 10-14 PZ	
CVUGASPOA2	bluebunch wheatgrass-Sandberg bluegrass prairie		
008XY140OR	1987	SHALLOW LOAM 12-14 PZ	
CVWGEDPOE1	Douglas buckwheat-Sandberg bluegrass scabland		
008BY009WA	1991	VERY SHALLOW 9-15 PZ	
CVWGPSSOP2	Sandberg bluegrass-needle-and-thread		
007XY012OR	1986	SANDY 8-10 PZ	
CVXGDCCOD1	tufted hairgrass-sedge alkaline bottomland		
009XY026WA	1986	WET MEADOW 15-24 PZ	
CVXGEC00E1	basin wildrye bottomlands		
009XY001WA	1986	ALKALI BOTTOM 15-18 PZ	

Section 1

**Compiled
by
Combined Report Area**

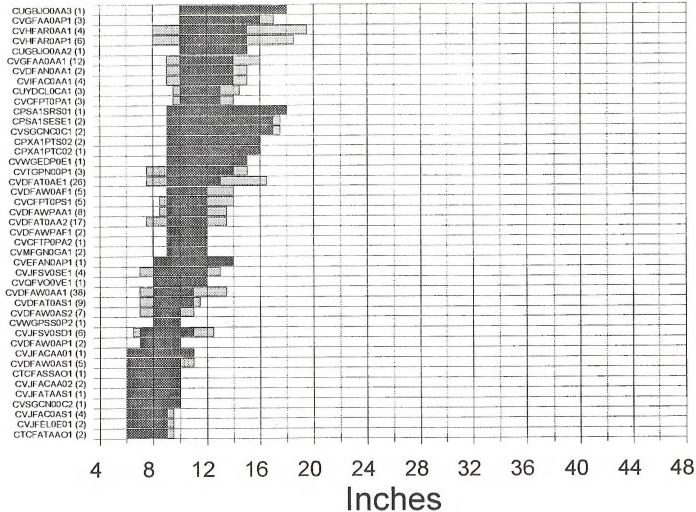
Precipitation

part 1



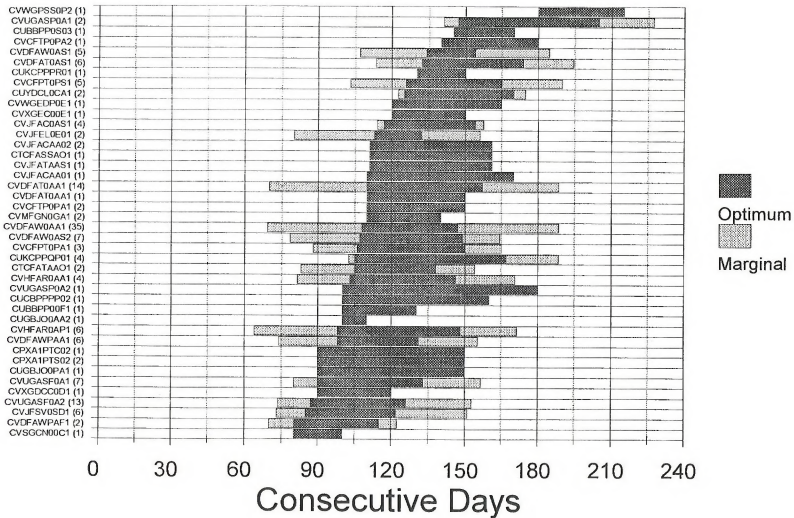
Precipitation

part 2



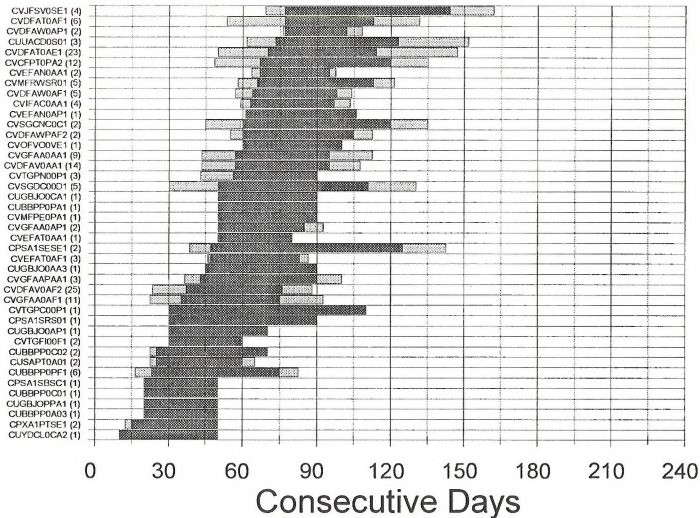
Frost Free Period

part 1



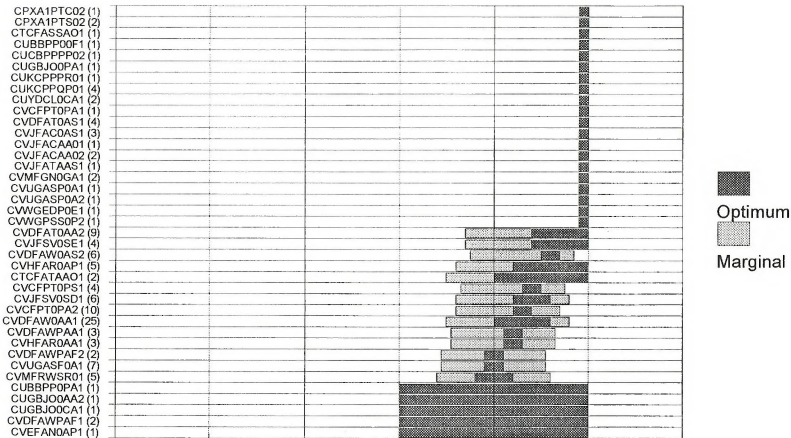
Frost Free Period

part 2



Soil Temperature Regime

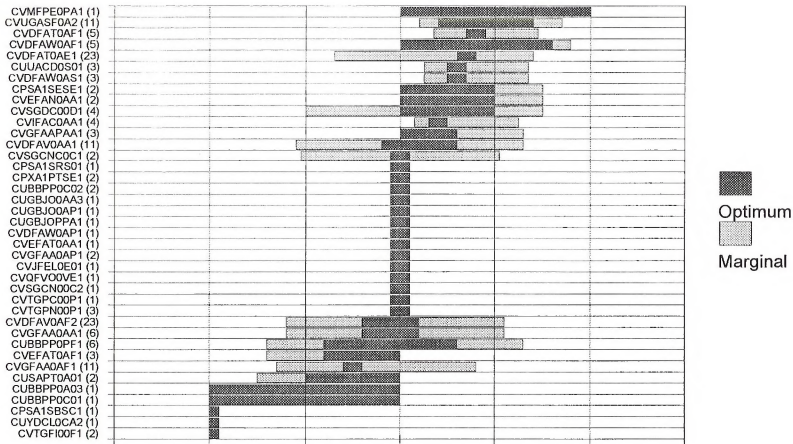
part I



<-Cryic-----Frigid-----Mesic->

Soil Temperature Regime

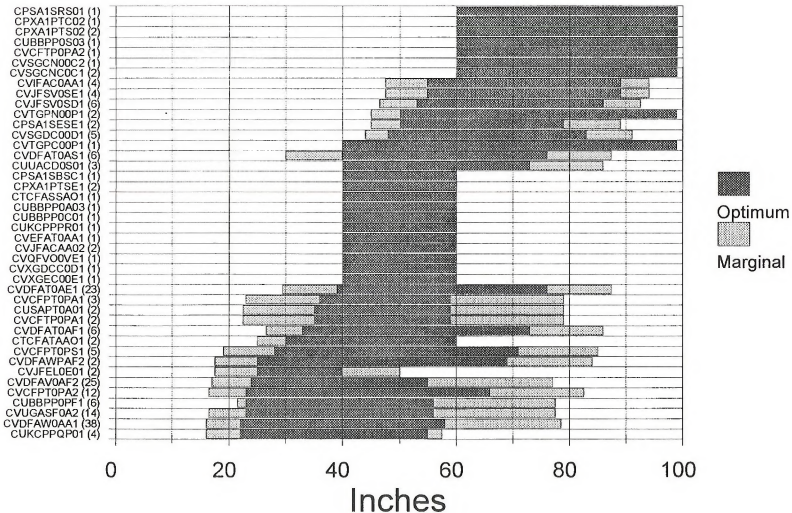
part 2



<-Cryic-----Frigid-----Mesic->

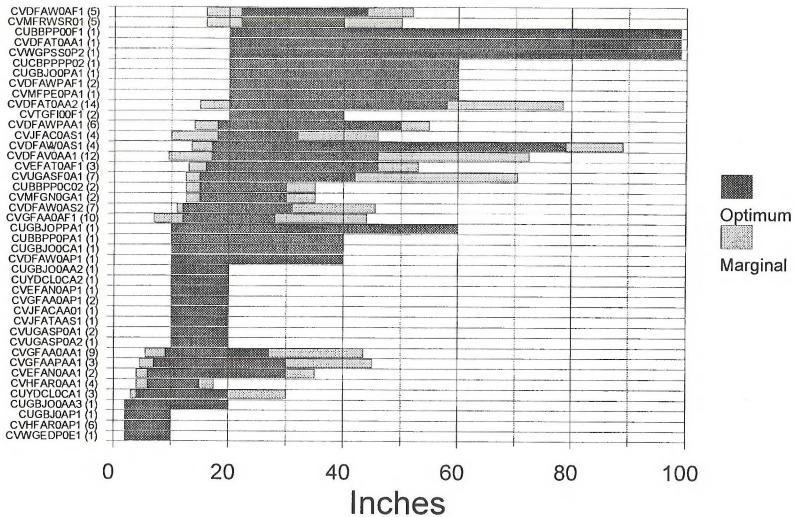
Soil Depth

part I



Soil Depth

part 2

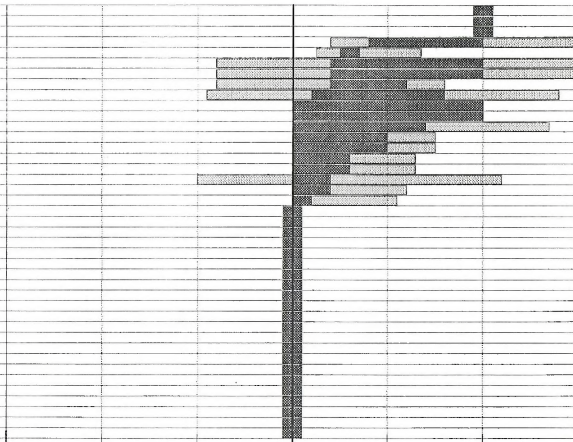


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Soil Texture

part I

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 CUGBJO0PA1 (1)
 CUYDCL0CA2 (1)
 CVMFRWSR01 (5)
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 CVJFAC0AS1 (4)
 CVDFAW0AF1 (5)
 CVJFSV0SD1 (6)
 CUGBJO0CA1 (1)
 CVQFV00VE1 (1)
 CVJFSV0SE1 (4)
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 CVUGASF0A1 (7)
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 CVJFEL0ED1 (2)
 CVMFNG0GA1 (2)
 CVMFPE0PA1 (1)
 CVSGCN00C2 (1)
 CVTGF100F1 (2)
 CVUGASP0A1 (2)
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 CVWFAC0A01 (1)
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 CVXGDCC0D1 (1)
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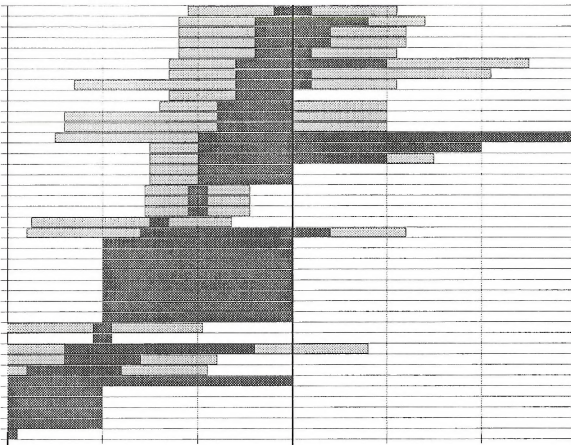
■ Optimum
 ■ Marginal

<-Sandy-----|-----Clayey->

Soil Texture

part 2

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 CVSGDC00D1 (5)
 CVDFAV0AF2 (25)
 CVUGASF0A2 (14)
 CVDFAT0AF1 (6)
 CVGFA00A1 (9)
 CVDFAW0AA1 (37)
 CVCFPT0PA2 (12)
 CVHFAR0AA1 (4)
 CVDFAWPAA1 (6)
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 CVDFAV0AA1 (14)
 CPSA1SESE1 (2)
 CVDFAWPAF1 (2)
 CVJFACAA02 (2)
 CUKCPP0P01 (4)
 CVEFAN0AA1 (2)
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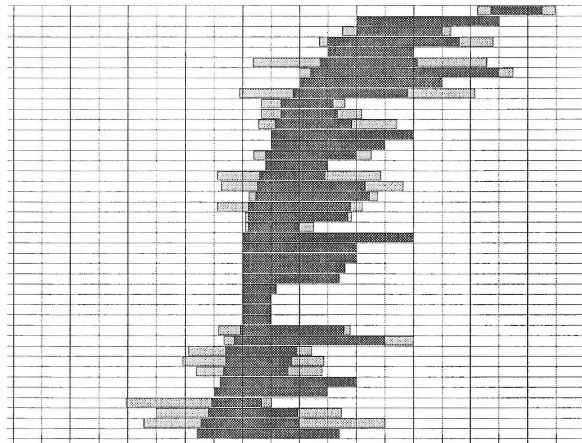
Optimum
 Marginal

<-Sandy-----|-----Clayey->

Elevation

part I

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CUSAPTOA01 (2)
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CUEFAT0AA1 (1)
CVGFAA0AF1 (11)
CVFANDAA1 (2)
CUGBJ00AA3 (1)
CVDFAV0AF2 (26)
CVIFAC0AA1 (4)
CVTGN00P1 (3)
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CVTGPC00P1 (1)
CVFANDAP1 (1)
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CVJFATAA51 (1)
CPXA1PTSE1 (2)
CVDFAV0AA1 (13)
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CVDFAW0AP1 (2)
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CVDFAWP0AF2 (2)
CUGBJ00AA2 (1)
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CUGBJ00AP1 (1)
CVSGCN00C2 (1)
CTCFASSA01 (1)
CVJFACA002 (2)
CVJFELOE01 (1)
CUBBPP0PF1 (6)
CPSA1SESE1 (2)
CVJFAC0AS1 (4)
CVDFAW0AS2 (7)
CVDFAW0AF1 (5)
CUBBPP0C01 (1)
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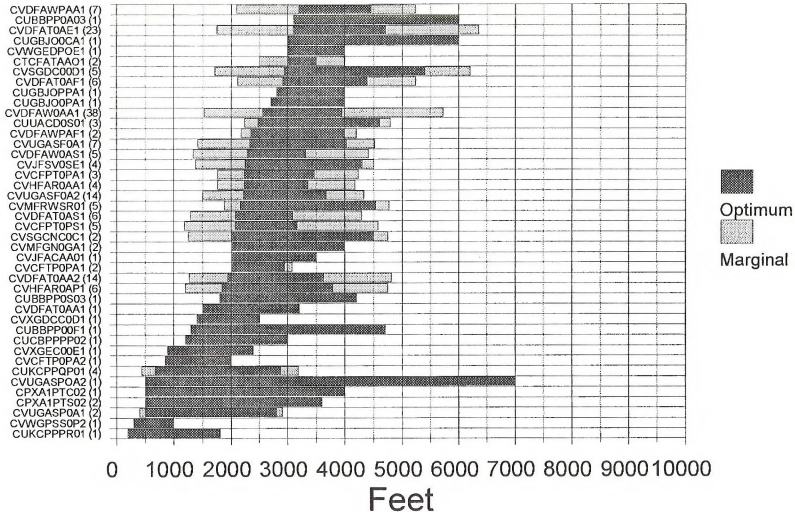


■ Optimum
▒ Marginal

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Feet

Elevation

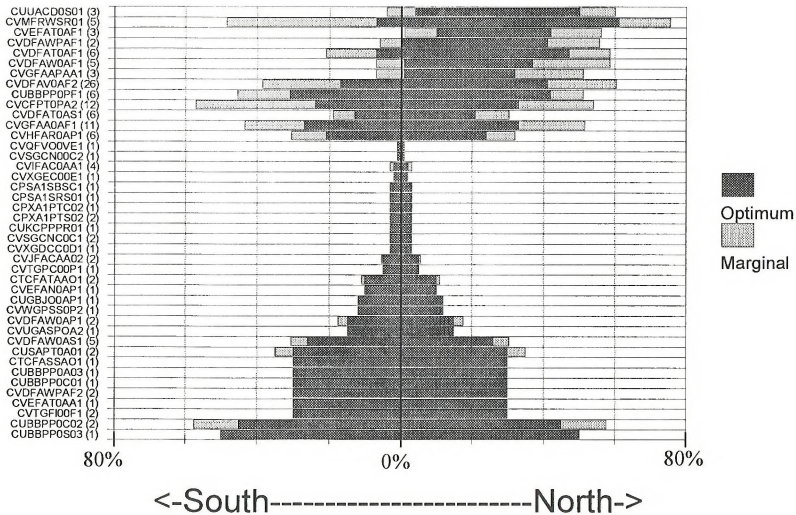
part 2



Slope and Aspect

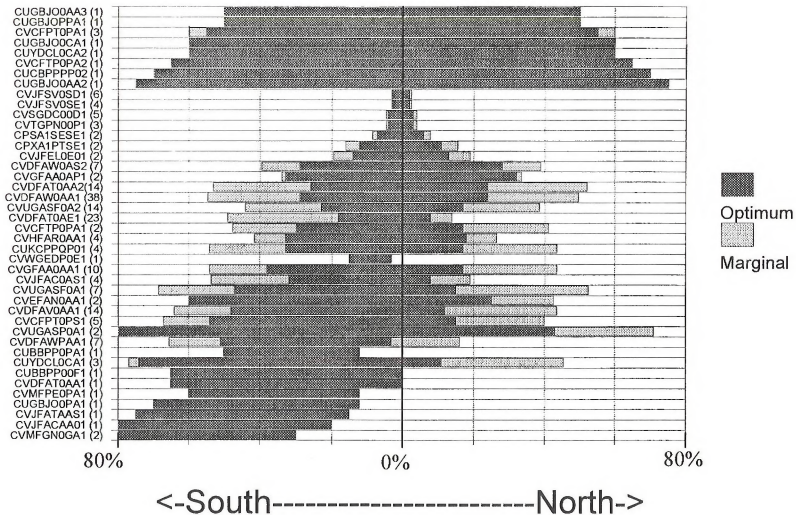
part 1

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Slope and Aspect

part 2

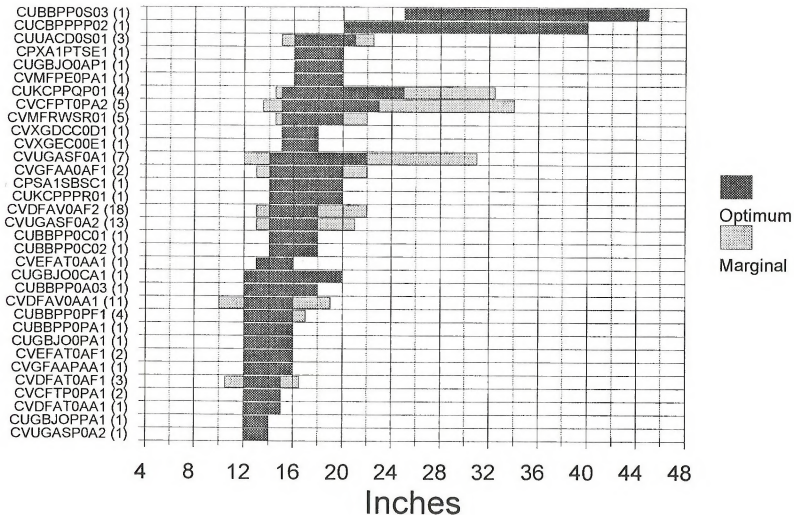


Section 2

**Compiled
by
Land Resource Region**

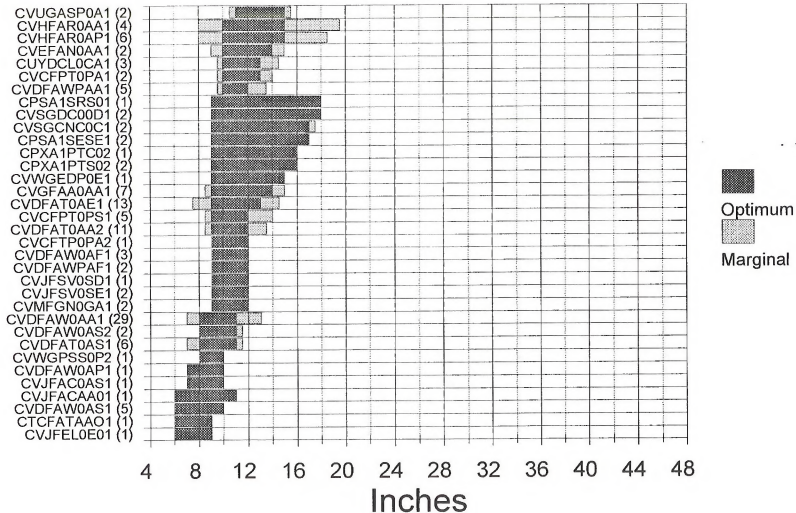
Precipitation (LRR B)

part 1



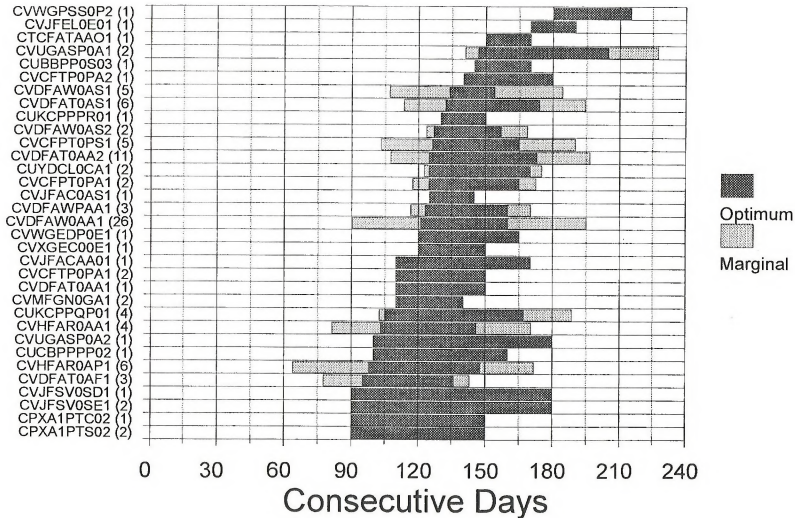
Precipitation (LRR B)

part 2



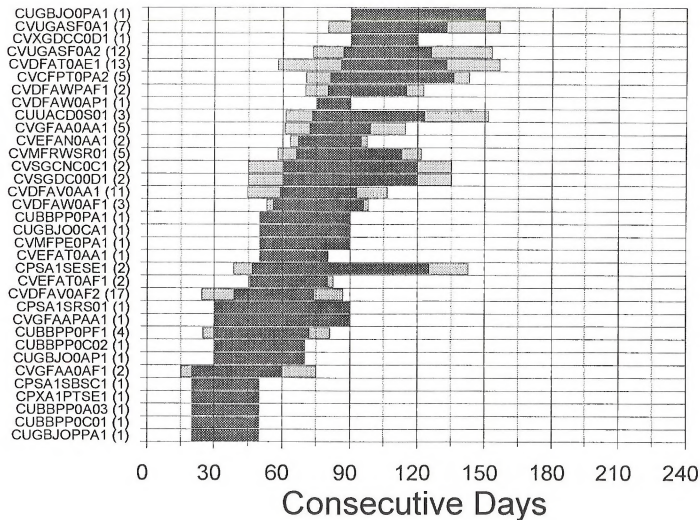
Frost Free Period (LRR B)

part I



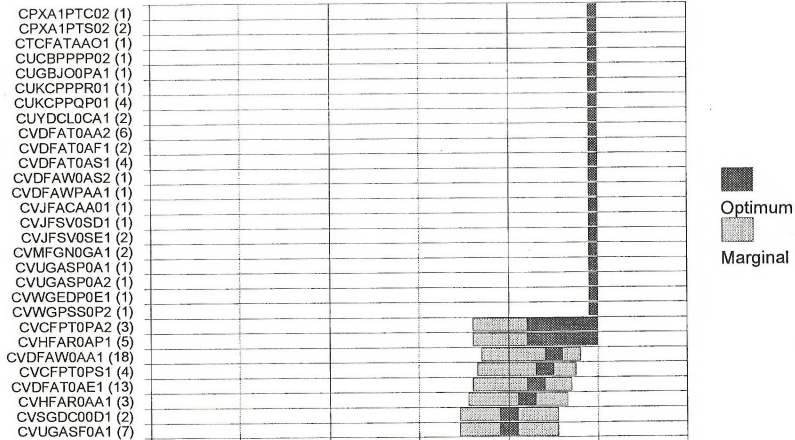
Frost Free Period (LRR B)

part 2



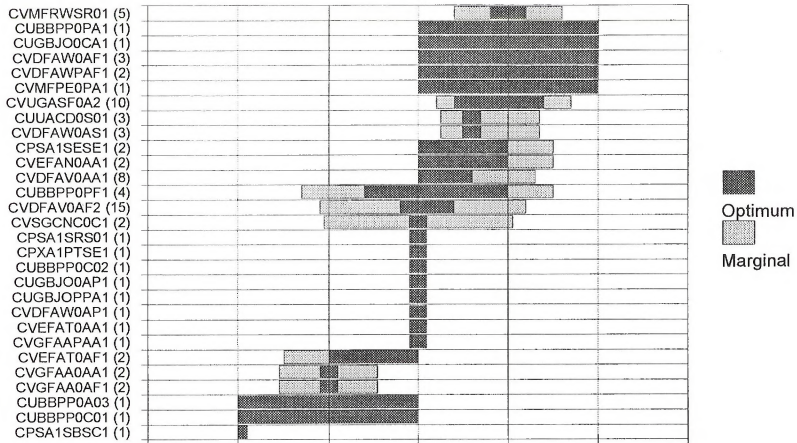
Soil Temperature Regime (LRR B)

part I



Soil Temperature Regime (LRR B)

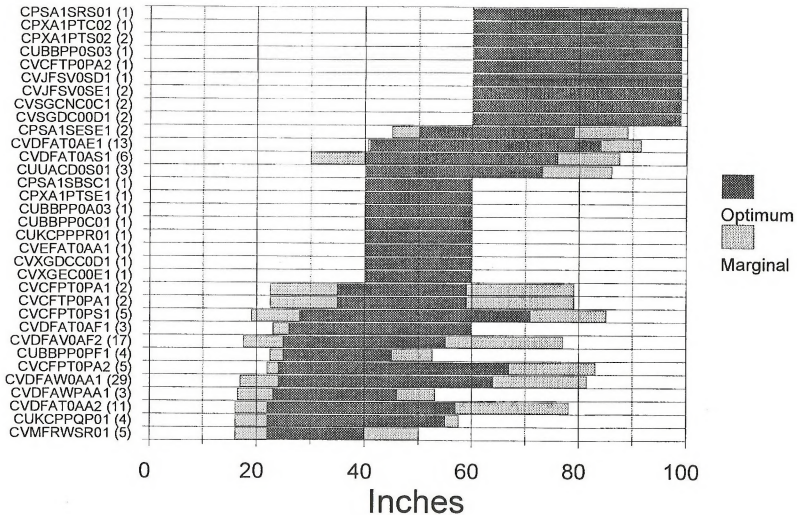
part 2



<-Cryic-----Frigid-----Mesic->

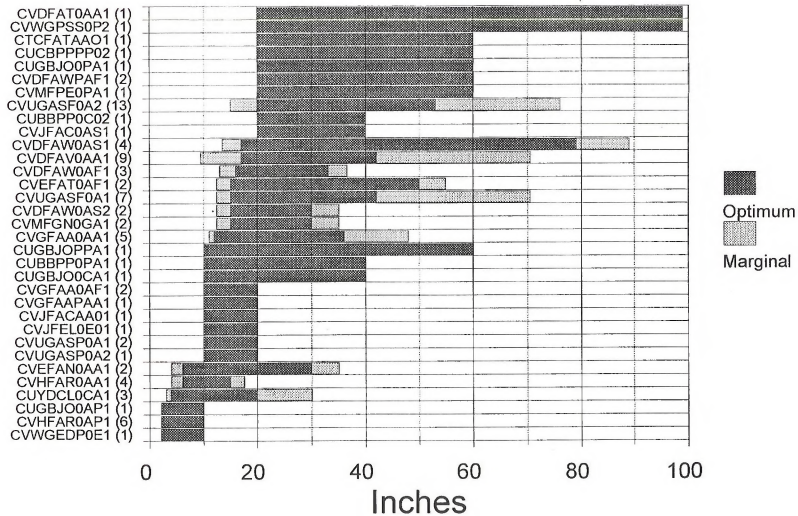
Soil Depth (LRR B)

part 1



Soil Depth (LRR B)

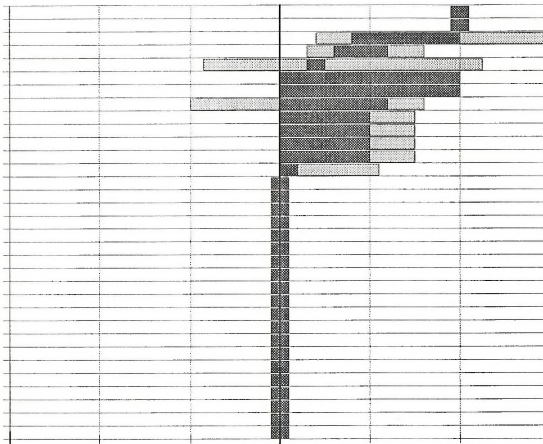
part 2





Soil Texture (LRR B)

part I

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 CVDFAT0AE1 (12)
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 CVGFAAPAA1 (1)
 CVDFAW0AF1 (3)
 CVEFAT0AF1 (2)
 CVGFAA0AF1 (2)
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 CVHFAR0AP1 (6)
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 CPXA1PTC02 (1)
 CPXA1PTS02 (2)
 CTCFATAA01 (1)
 CUBBPP0C02 (1)
 CUBBPP0PA1 (1)
 CUCBPPP02 (1)
 CUUACD0S01 (3)
 CUYDCL0CA1 (3)
 CVEFAT0AA1 (1)
 CVJFACAA01 (1)
 CVJFEL0E01 (1)
 CVJFSV0SD1 (1)
 CVJFSV0SE1 (2)
 CVMFGN0GA1 (2)
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 CVWGEDP0E1 (1)

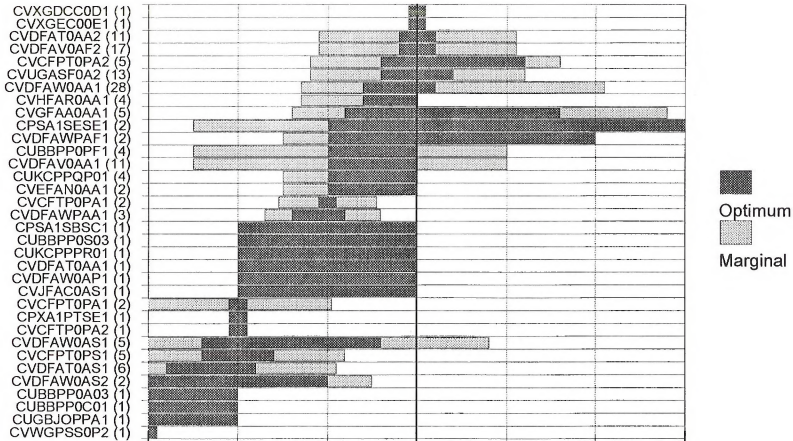


 Optimum
 Marginal

<-Sandy-----|-----Clayey->

Soil Texture (LRR B)

part 2

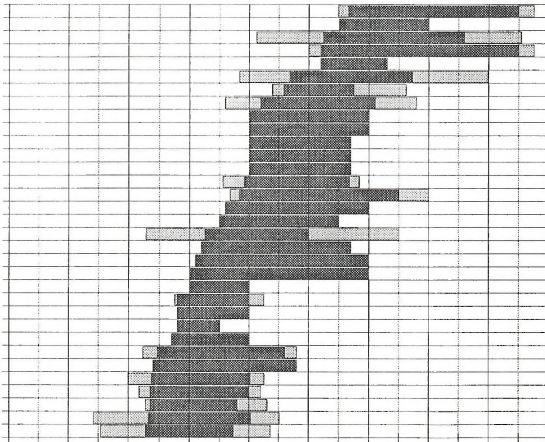


<-Sandy-----|-----Clayey->

Elevation (LRR B)

part 1

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 CVDFAW0AP1 (1)
 CVDFAV0AF2 (18)
 CVGFAA0AA1 (6)
 CVDFAV0AA1 (10)
 CPSA1SBSC1 (1)
 CUBBPP0PA1 (1)
 CUBBPP0C02 (1)
 CUGBJO0AP1 (1)
 CVGFAAPAA1 (1)
 CUBBPP0PF1 (4)
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 CUBBPP0C01 (1)
 CPSA1SRS01 (1)
 CUYDCL0CA1 (3)
 CVMFPE0PA1 (1)
 CUBBPP0A03 (1)
 CUGBJO0CA1 (1)
 CVWGEDP0E1 (1)
 CVDFAW0AF1 (3)
 CUGBJOPPA1 (1)
 CPXA1PTSE1 (1)
 CUGBJO0PA1 (1)
 CUUACD0S01 (3)
 CVJFAC0AS1 (1)
 CVCFPT0PA2 (5)
 CVDFAWPAF1 (2)
 CVDFAW0AS2 (2)
 CVUGASF0A1 (7)
 CVUGASF0A2 (13)



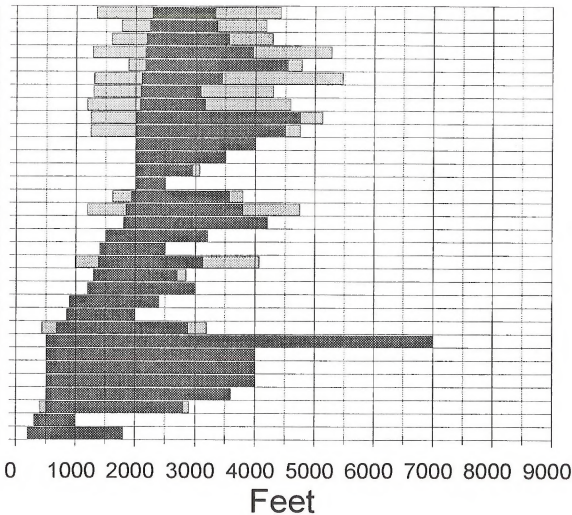
 Optimum
 Marginal

0 1000 2000 3000 4000 5000 6000 7000 8000 9000
Feet

Elevation (LRR B)

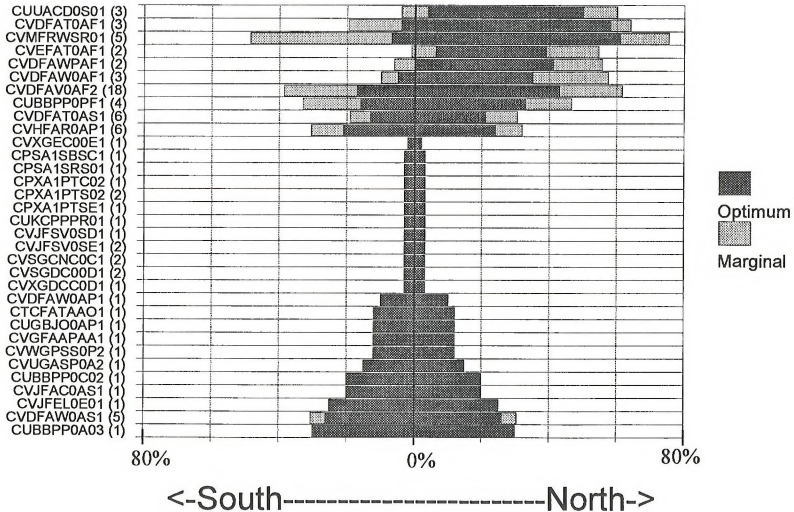
part 2

CVDFAW0AS1 (5)
CVHFAR0AA1 (4)
CVDFAWPAA1 (4)
CVDFAT0AE1 (13)
CVMFRWSR01 (5)
CVDFAW0AA1 (29)
CVDFAT0AS1 (6)
CVCFFT0PS1 (5)
CVSGDC00D1 (2)
CVSGCNC0C1 (2)
CVMFGN0GA1 (2)
CVJFACAA01 (1)
CVCFTP0PA1 (2)
CTCFATAA01 (1)
CVDFAT0AF1 (3)
CVHFAR0AP1 (6)
CUBBPP0S03 (1)
CVDFAT0AA1 (1)
CVXGDC00D1 (1)
CVDFAT0AA2 (11)
CVCFFT0PA1 (2)
CUCBPPPP02 (1)
CVXGEC00E1 (1)
CVCFFT0PA2 (1)
CUKCPPQ01 (4)
CVUGASP0A2 (1)
CPXA1PTC02 (1)
CVJFSV0SD1 (1)
CVJFSV0SE1 (2)
CPXA1PTS02 (2)
CVUGASP0A1 (2)
CWWGPSS0P2 (1)
CUKCPPPR01 (1)



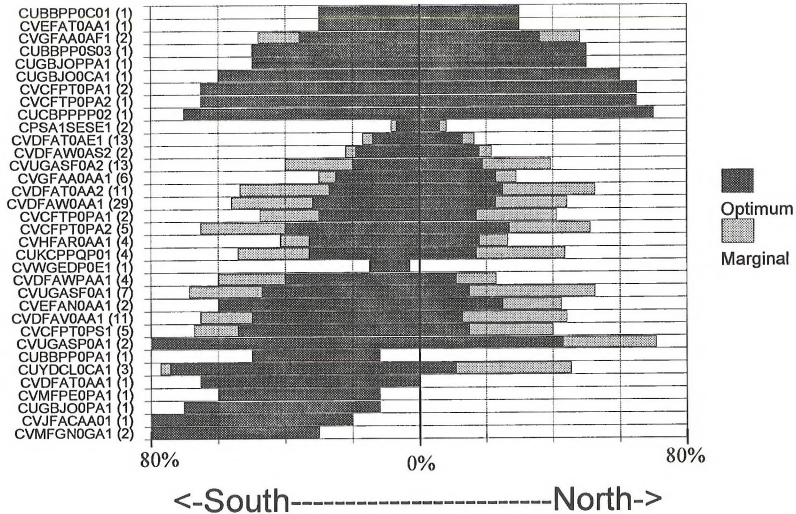
Slope and Aspect (LRR B)

part I



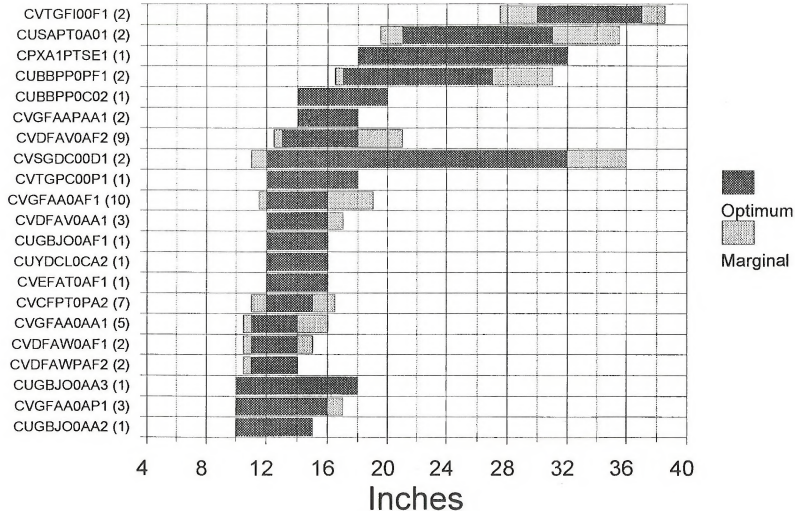
Slope and Aspect (LRR B)

part 2



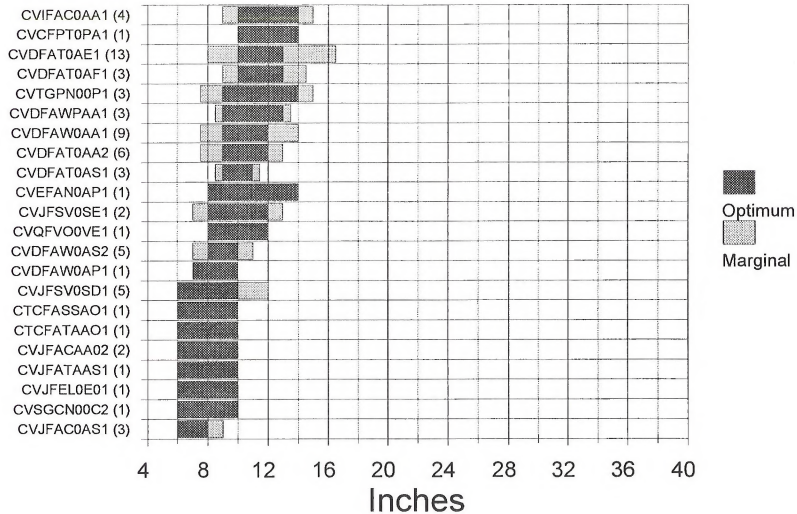
Precipitation (LRR D)

part 1



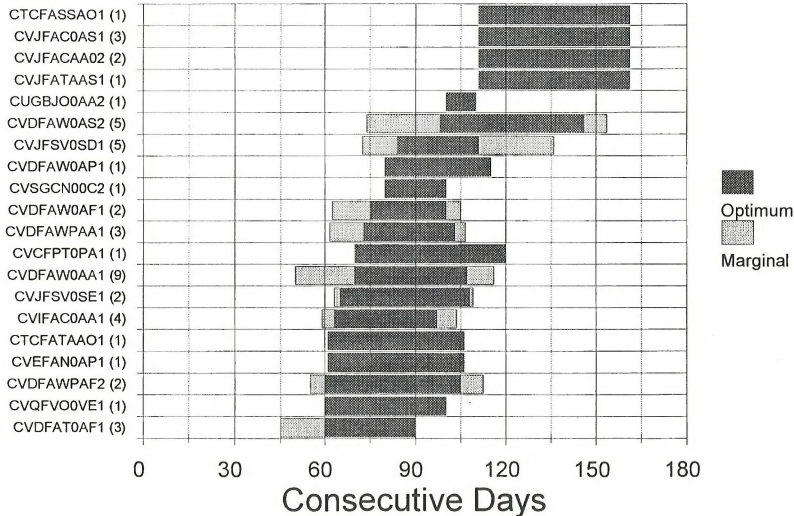
Precipitation (LRR D)

part 2



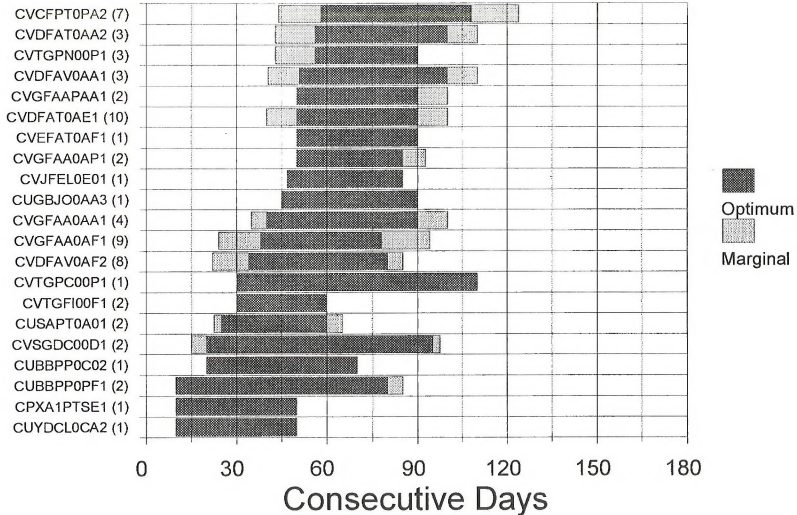
Frost Free Period (LRR D)

part 1



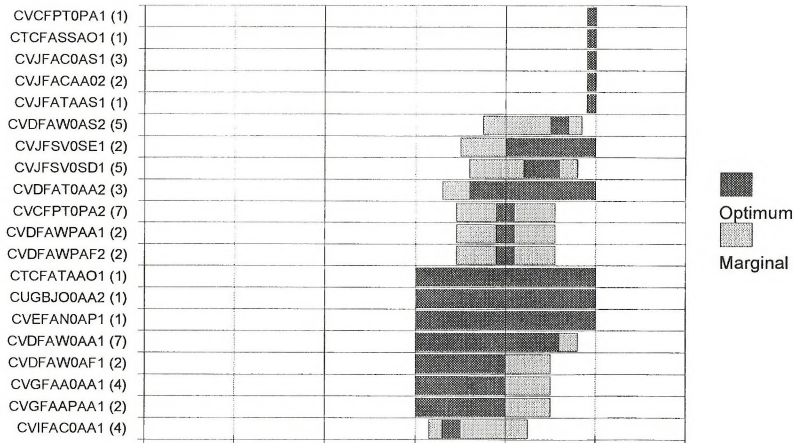
Frost Free Period (LRR D)

part 2



Soil Temperature Regime (LRR D)

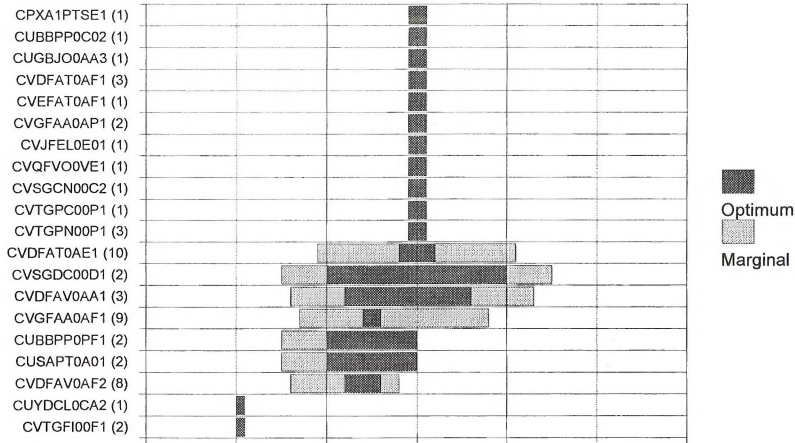
part I



<-Cryic-----Frigid-----Mesic->

Soil Temperature Regime (LRR D)

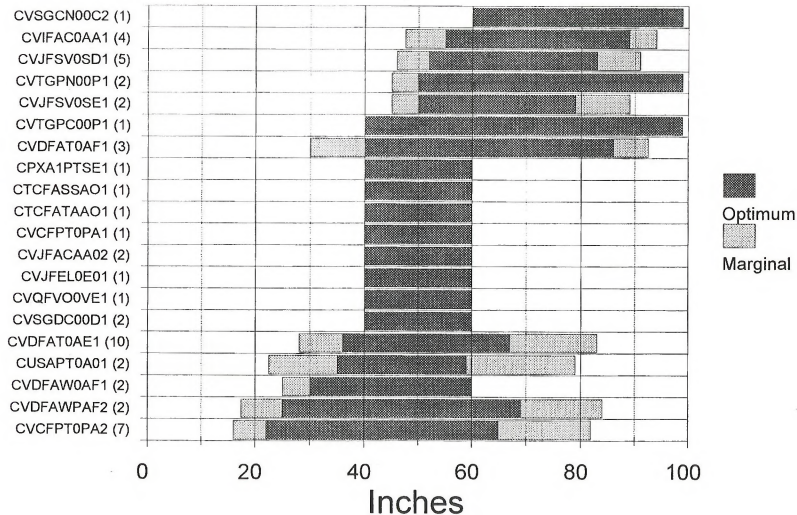
part 2



<-Cryic-----Frigid-----Mesic->

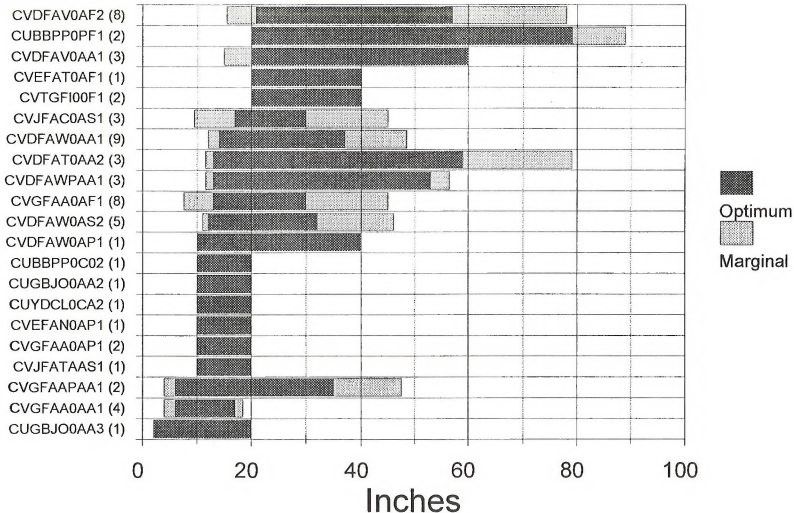
Soil Depth (LRR D)

part 1



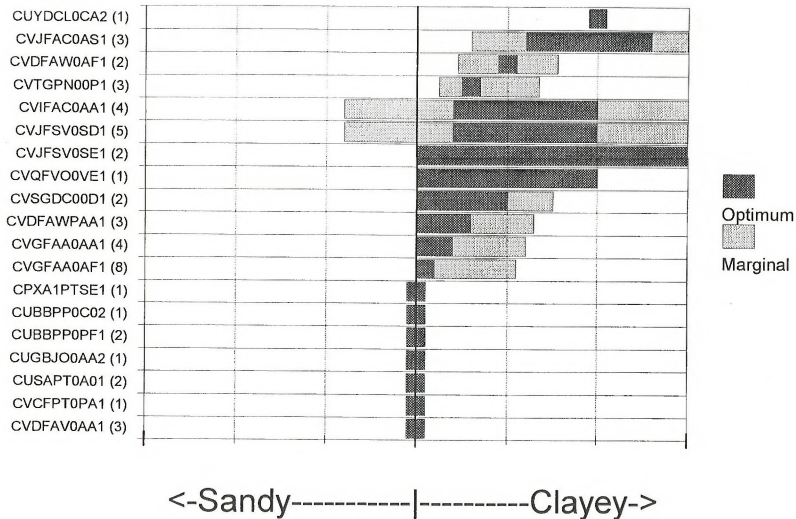
Soil Depth (LRR D)

part 2



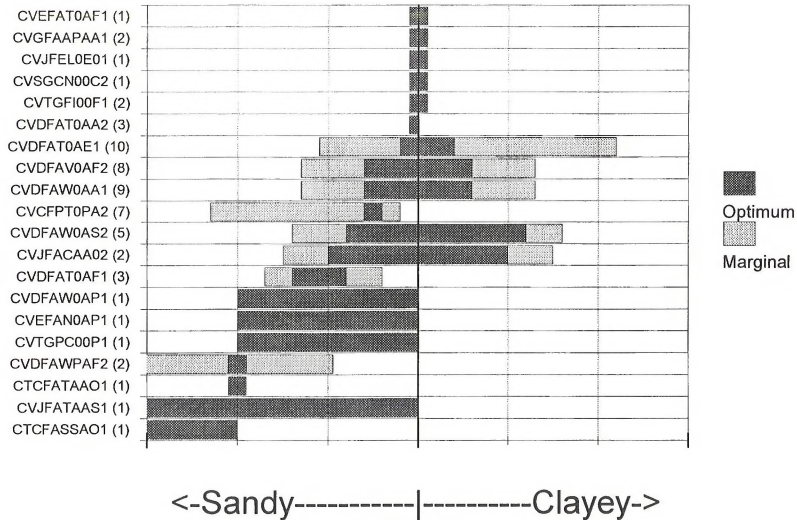
Soil Texture (LRR D)

part I



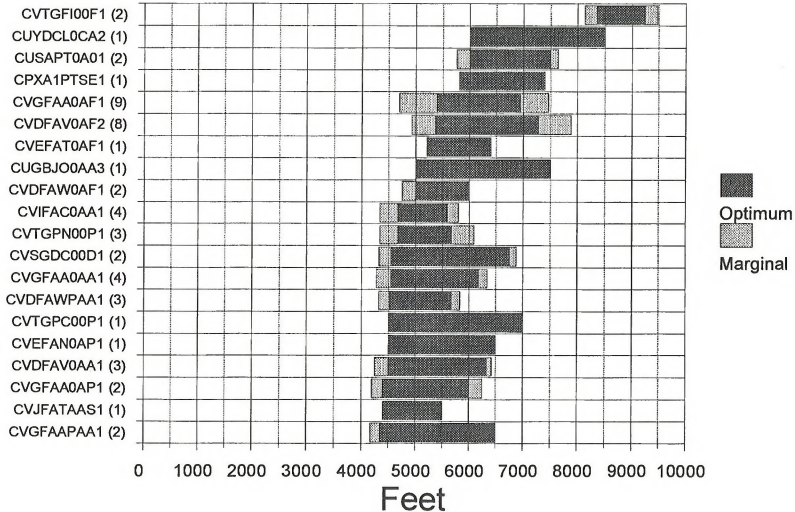
Soil Texture (LRR D)

part 2



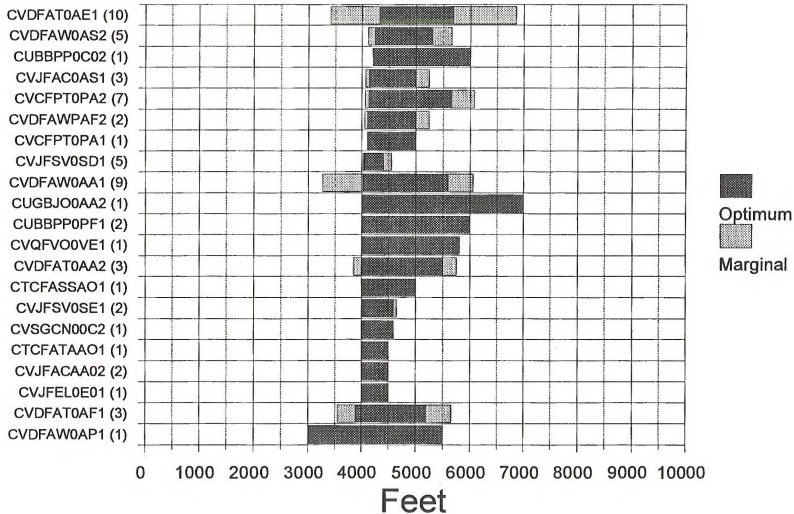
Elevation (LRR D)

part 1



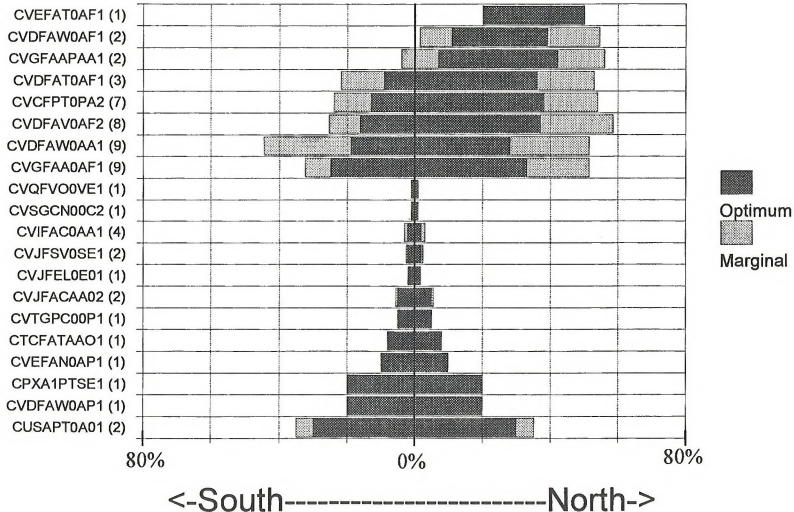
Elevation (LRR D)

part 2



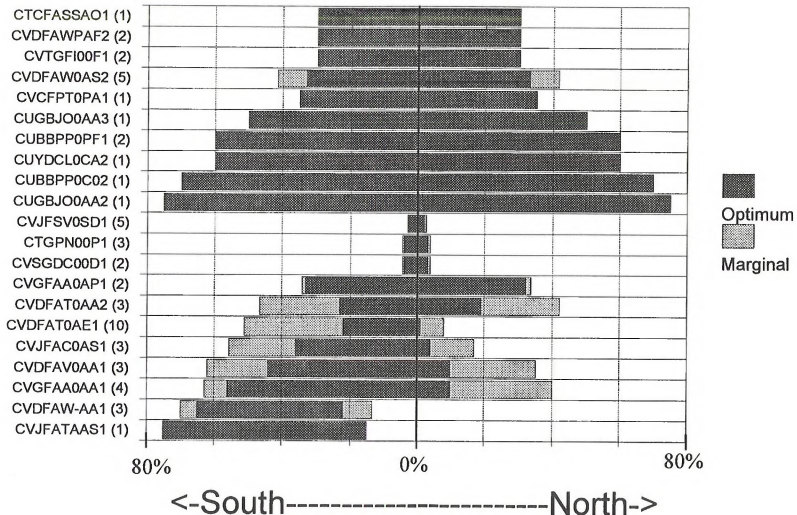
Slope and Aspect (LRR D)

part I



Slope and Aspect (LRR D)

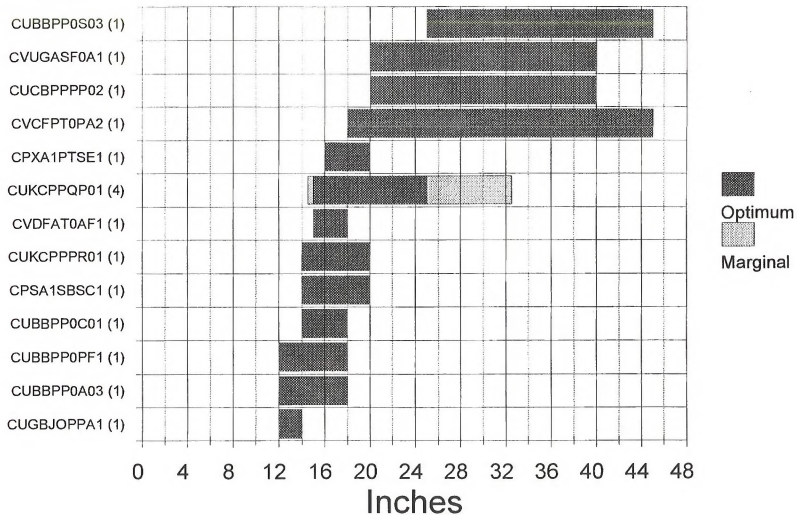
part 2



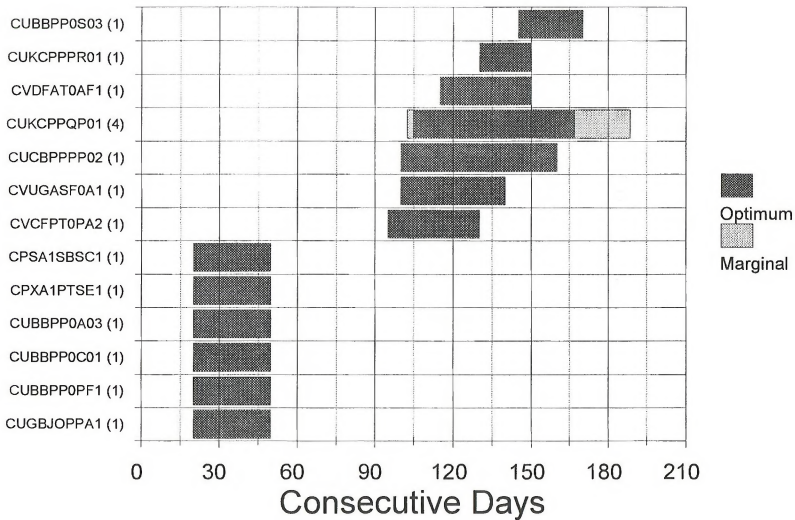
Section 3

**Compiled
by
Major Land Resource Area**

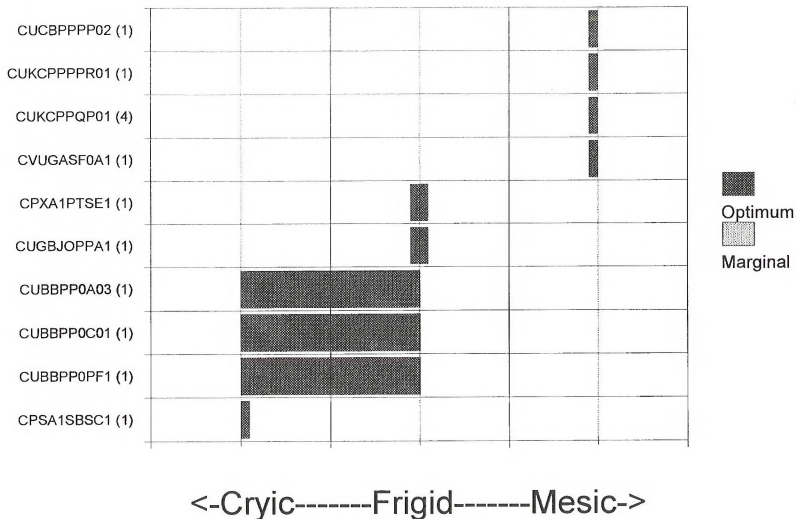
Precipitation (MLRA B6)



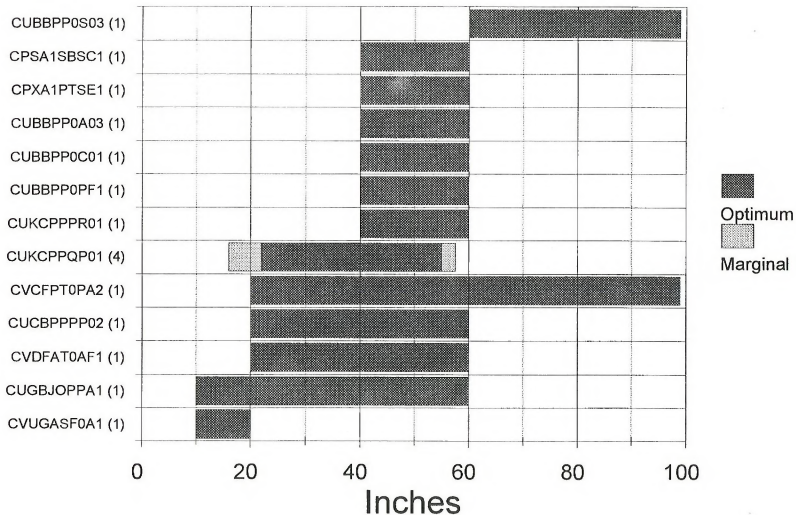
Frost Free Period (MLRA B6)



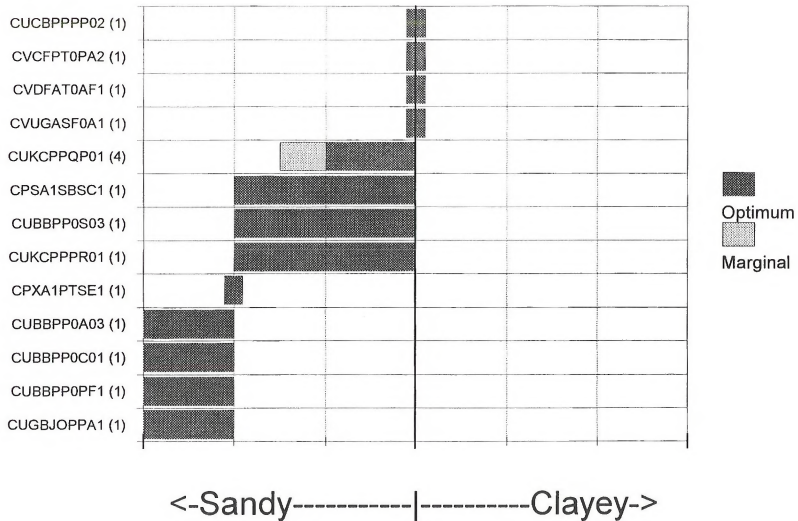
Soil Temperature Regime (MLRA B6)



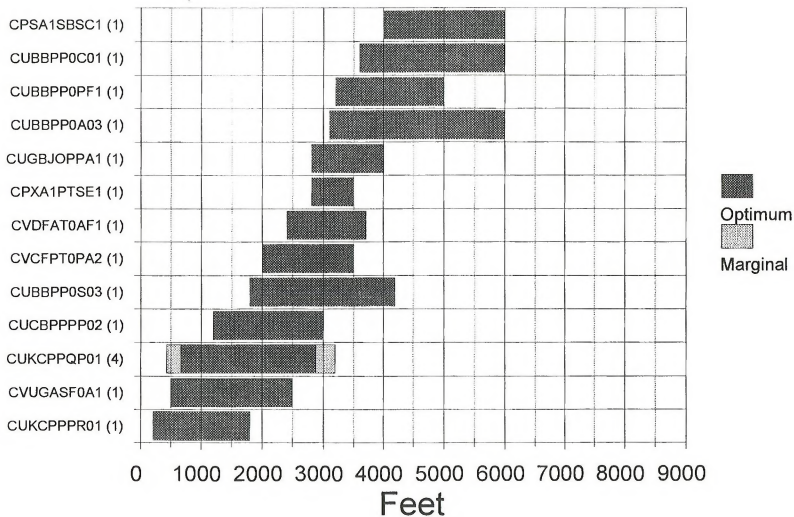
Soil Depth (MLRA B6)



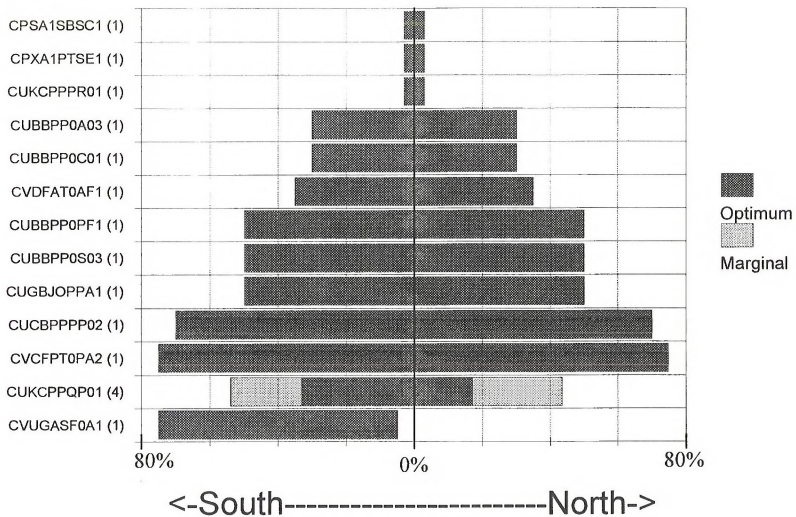
Soil Texture (MLRA B6)



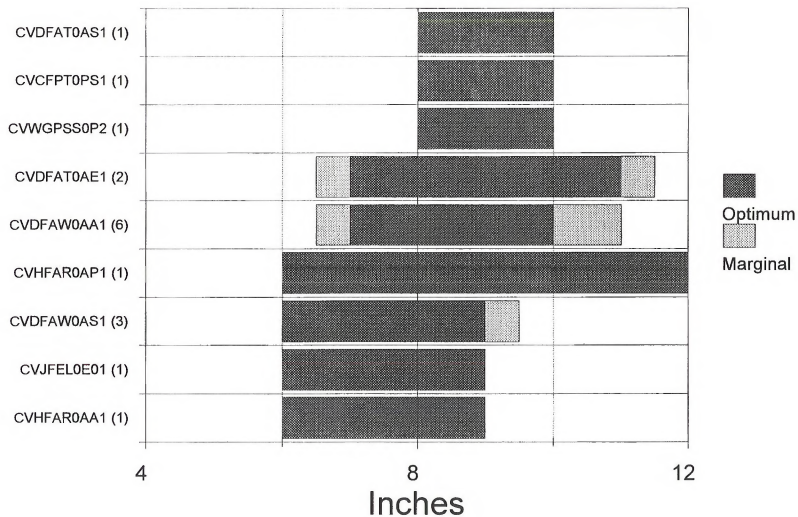
Elevation (MLRA B6)



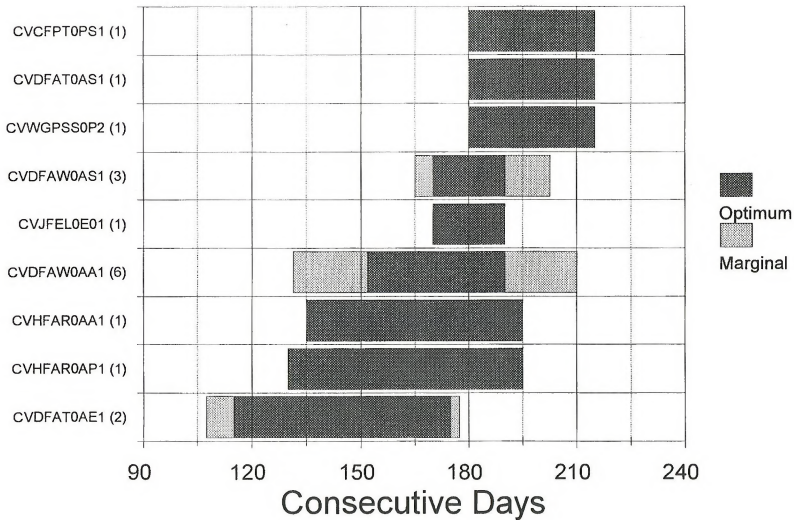
Slope and Aspect (MLRA B6)



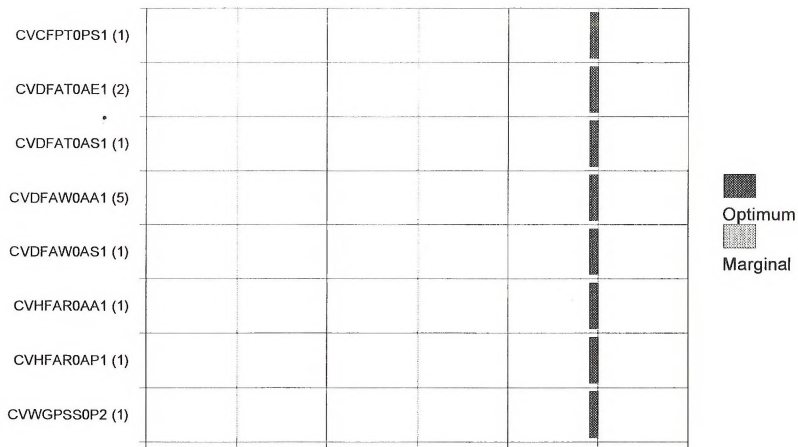
Precipitation (MLRA B7)



Frost Free Period (MLRA B7)

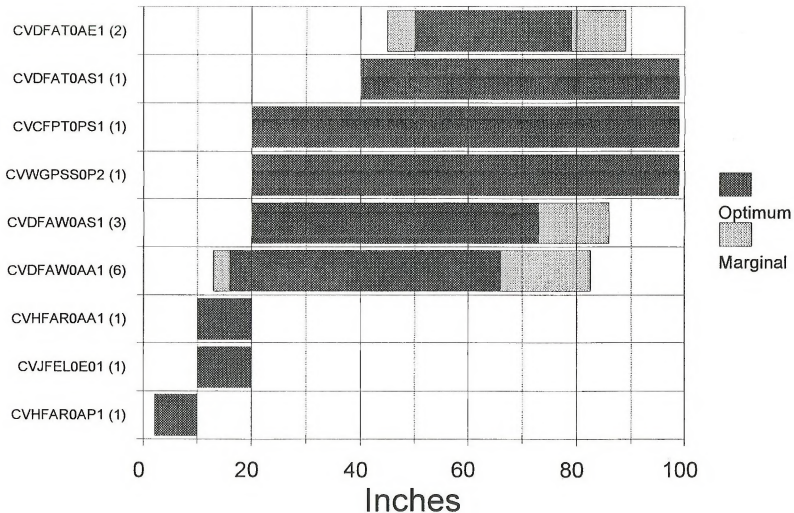


Soil Temperature Regime (MLRA B7)

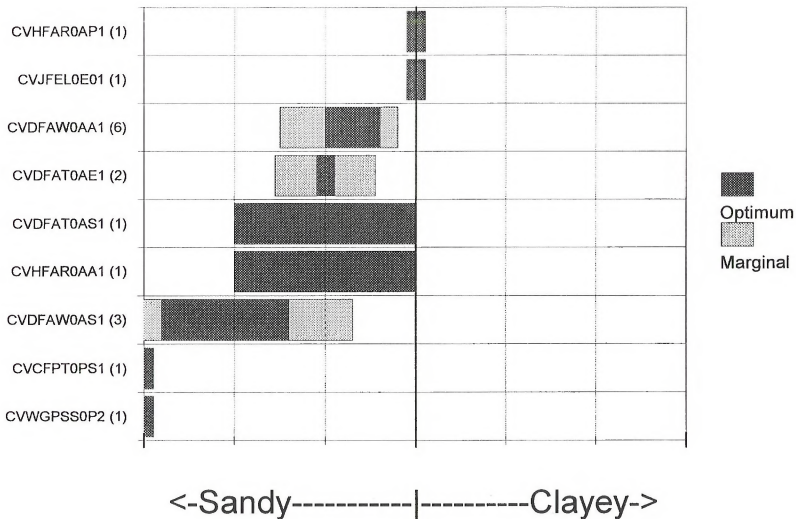


<-Cryic-----Frigid-----Mesic->

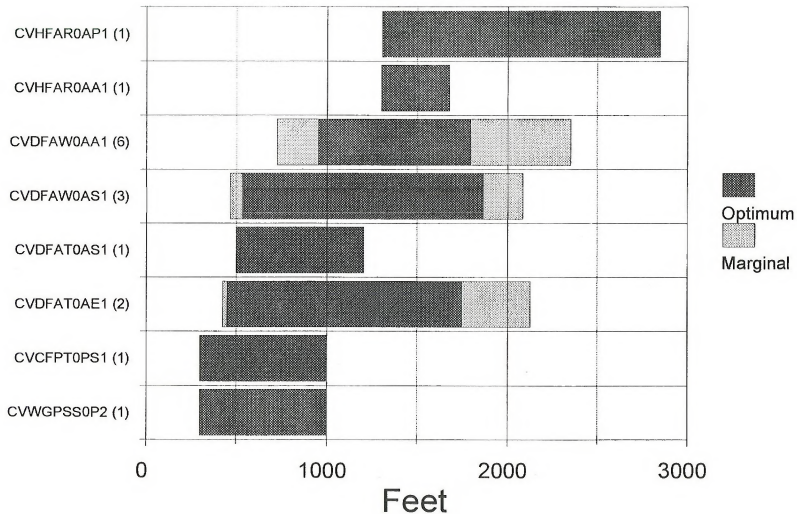
Soil Depth (MLRA B7)



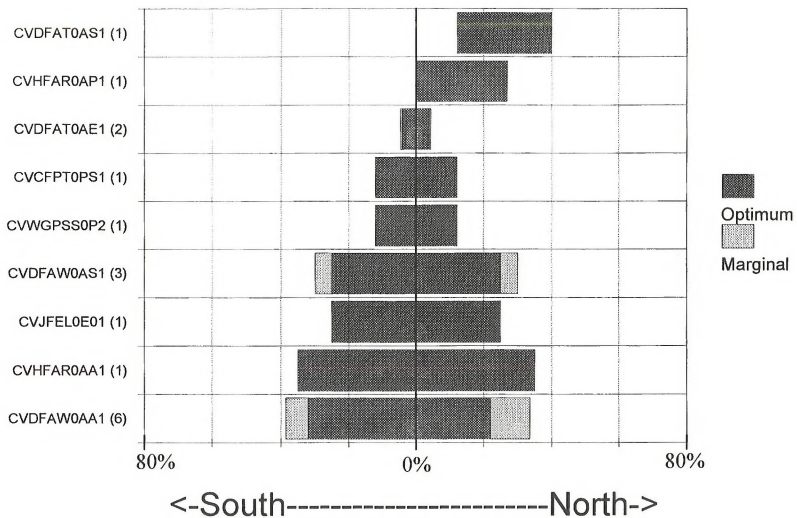
Soil Texture (MLRA B7)



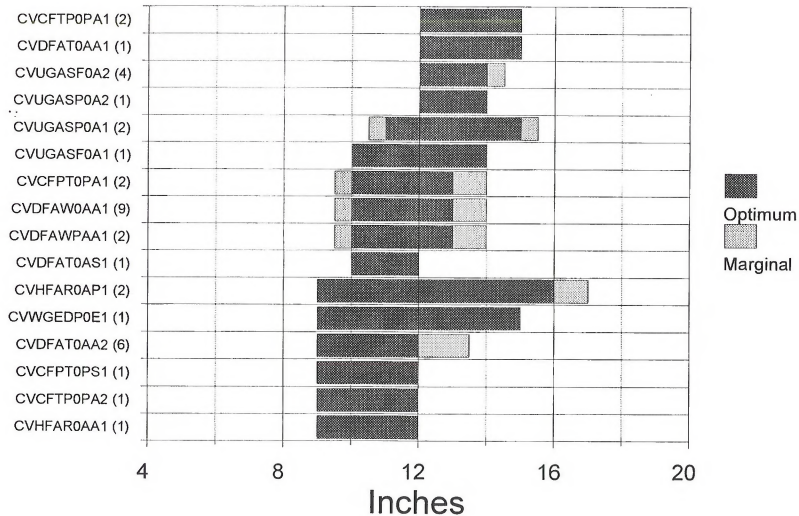
Elevation (MLRA B7)



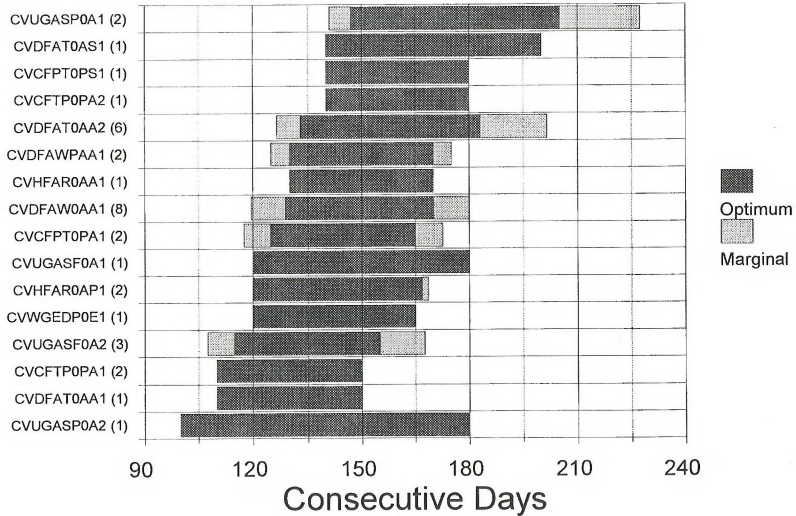
Slope and Aspect (MLRA B7)



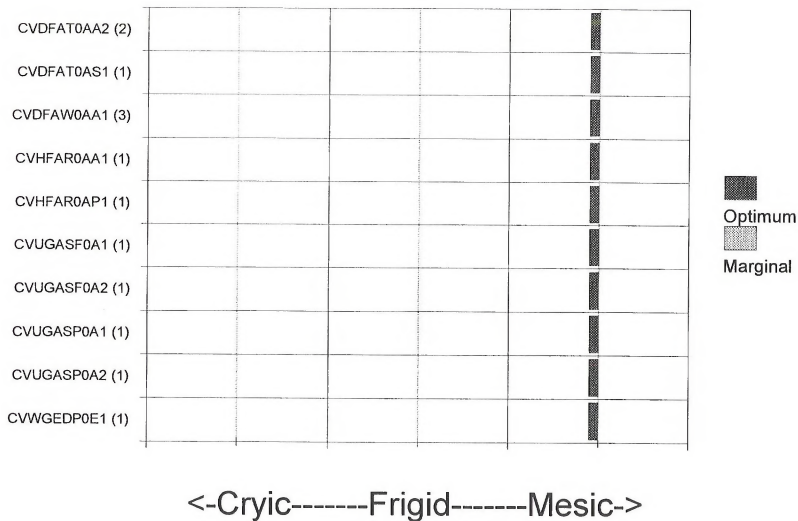
Precipitation (MLRA B8)



Frost Free Period (MLRA B8)

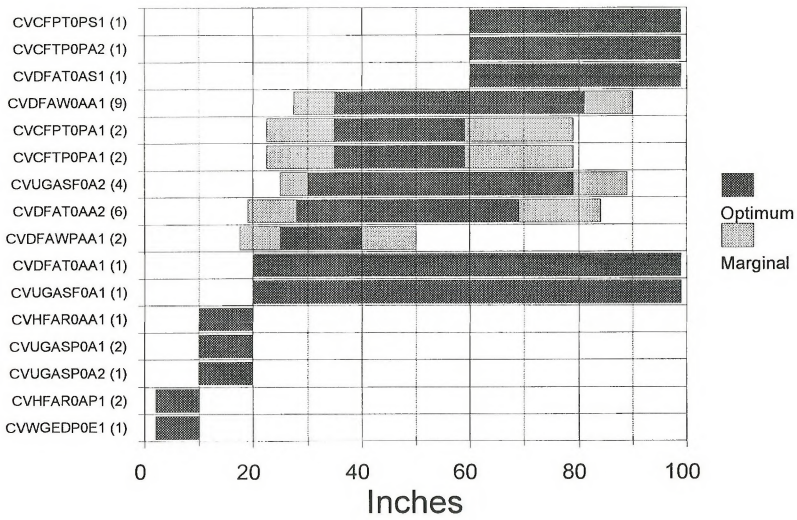


Soil Temperature Regime (MLRA B8)

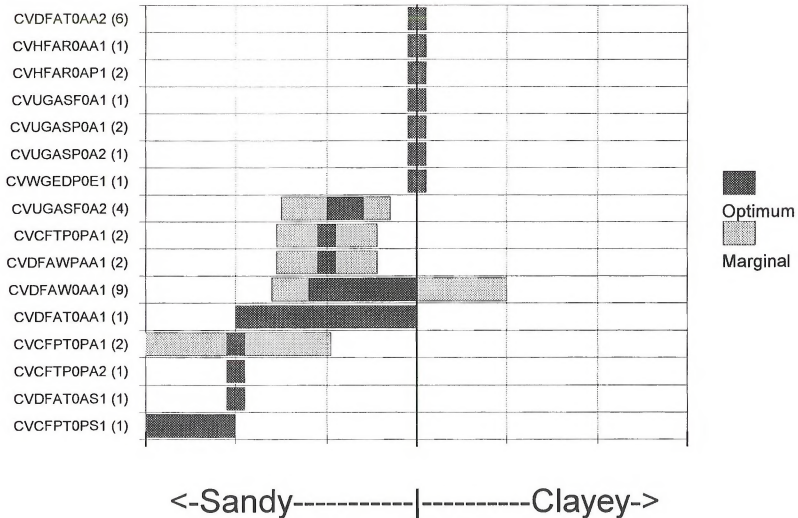


Soil Depth (MLRA B8)

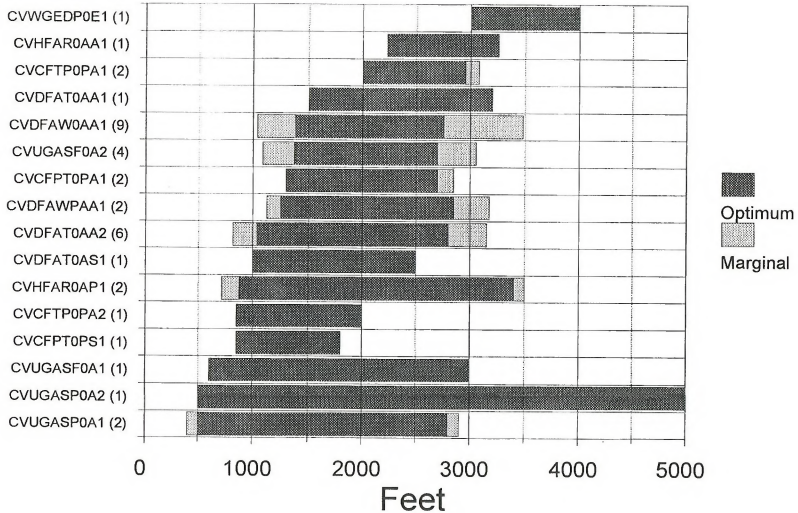
18



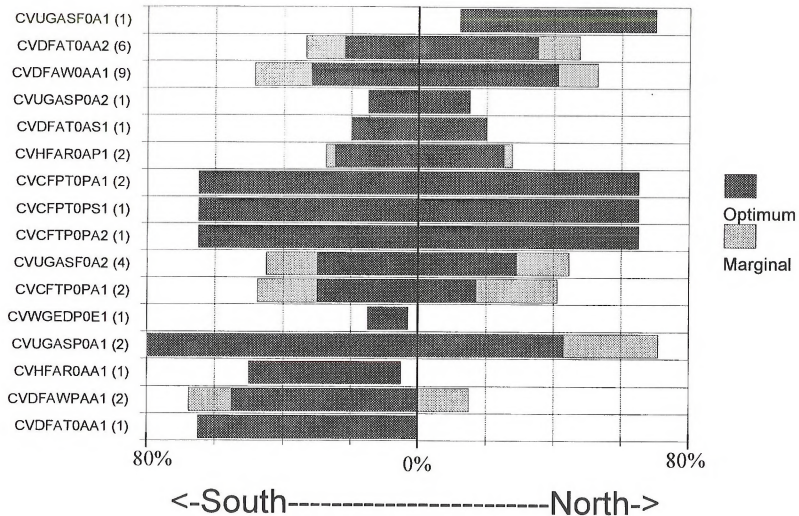
Soil Texture (MLRA B8)



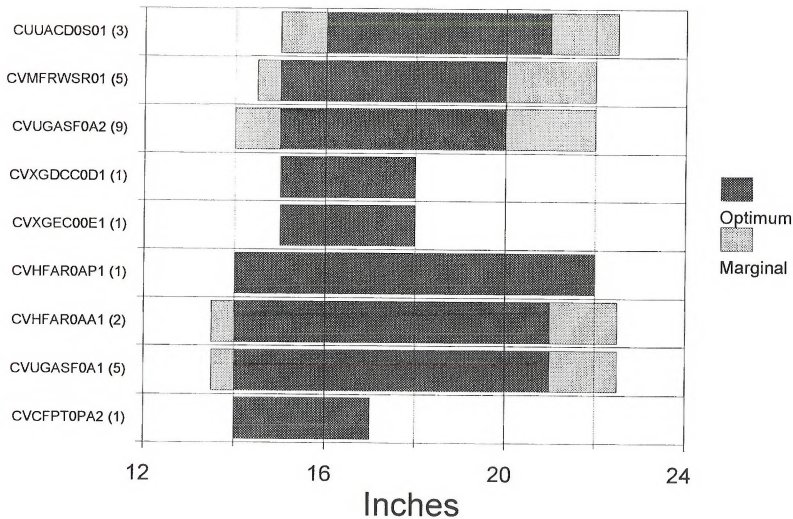
Elevation (MLRA B8)



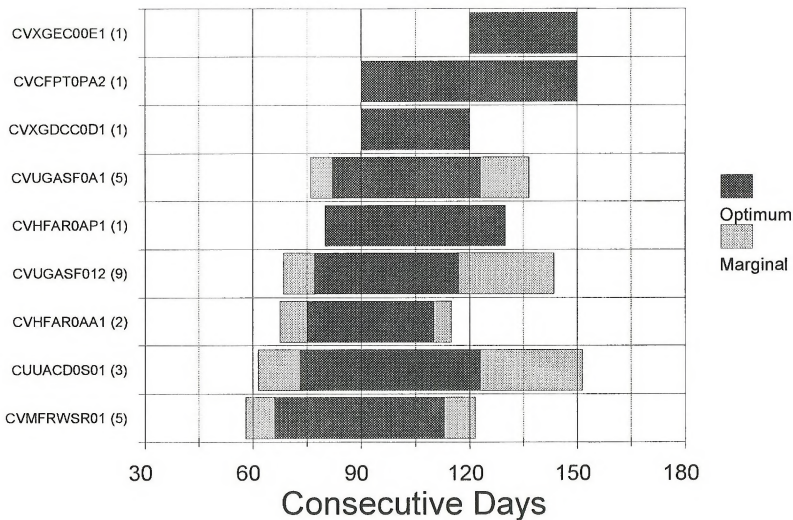
Slope and Aspect (MLRA B8)



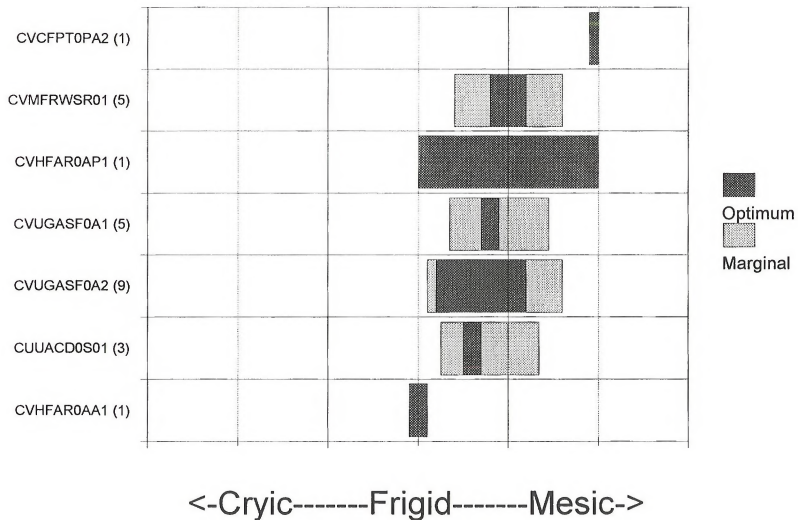
Precipitation (MLRA B9)



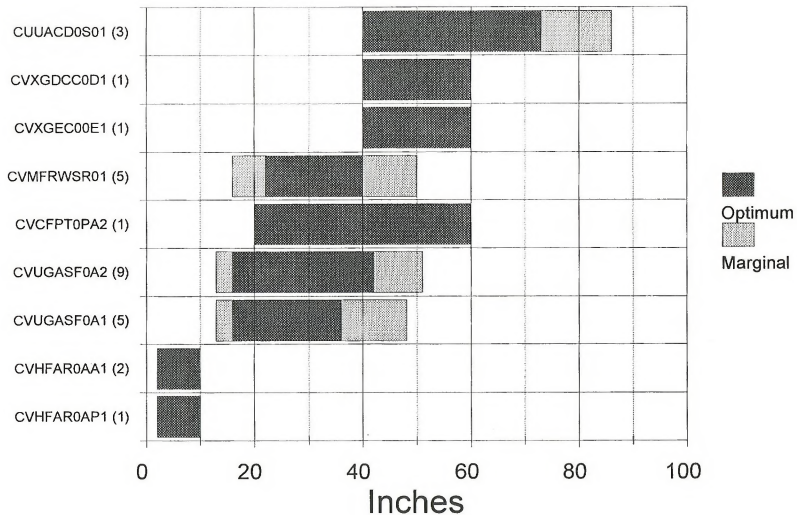
Frost Free Period (MLRA B9)



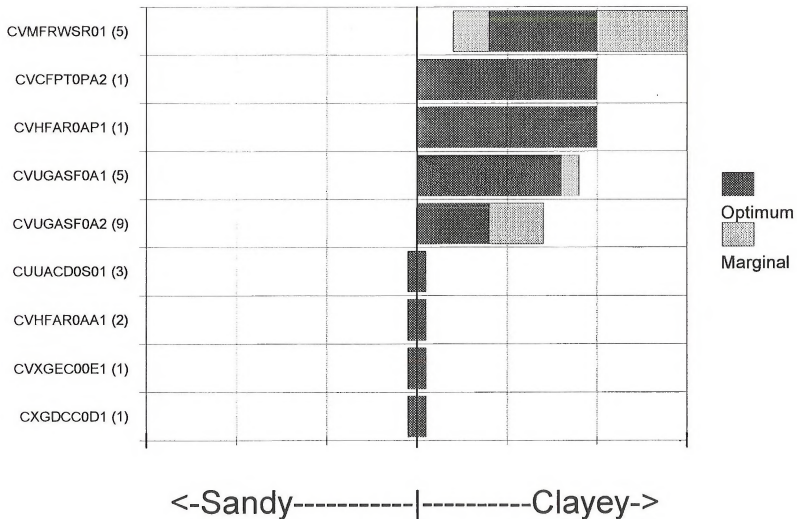
Soil Temperature Regime (MLRA B9)



Soil Depth (MLRA B9)

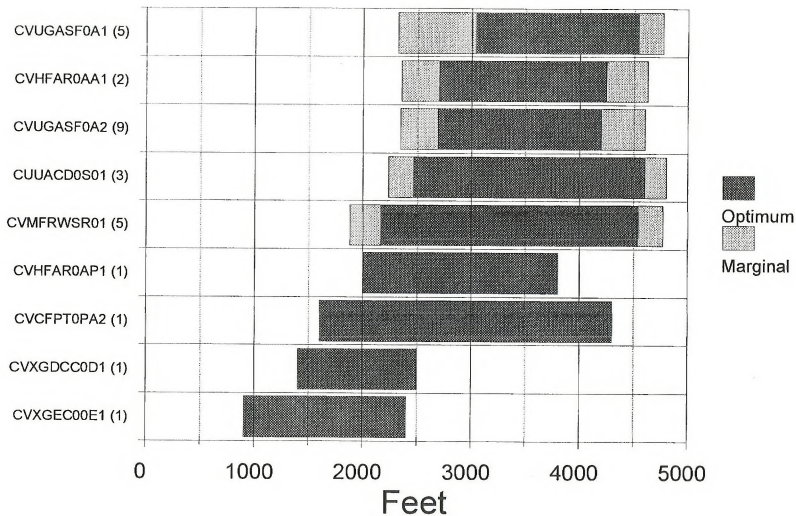


Soil Texture (MLRA B9)

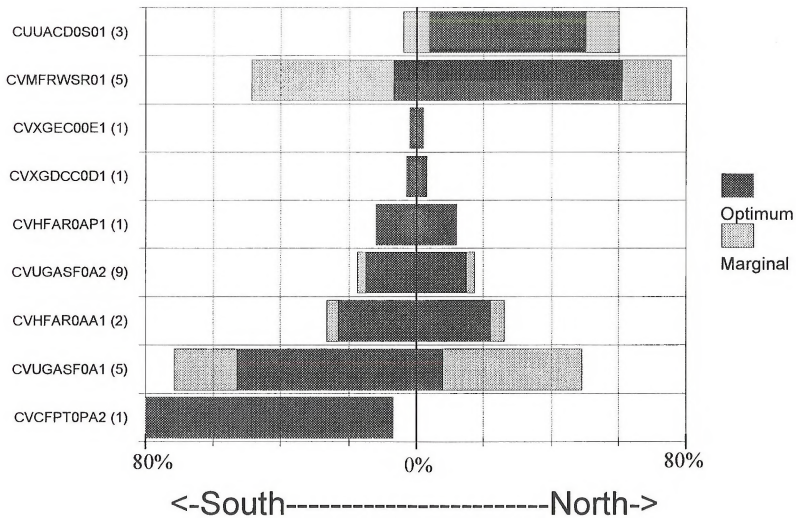


Elevation (MLRA B9)

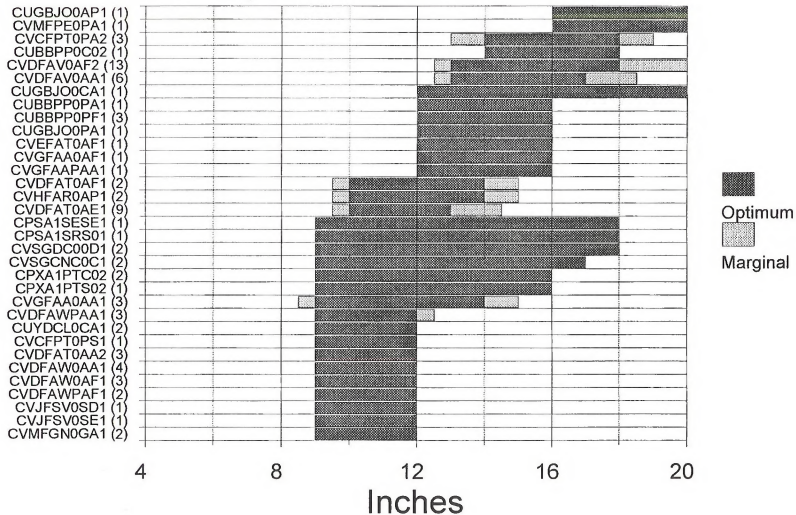
T6



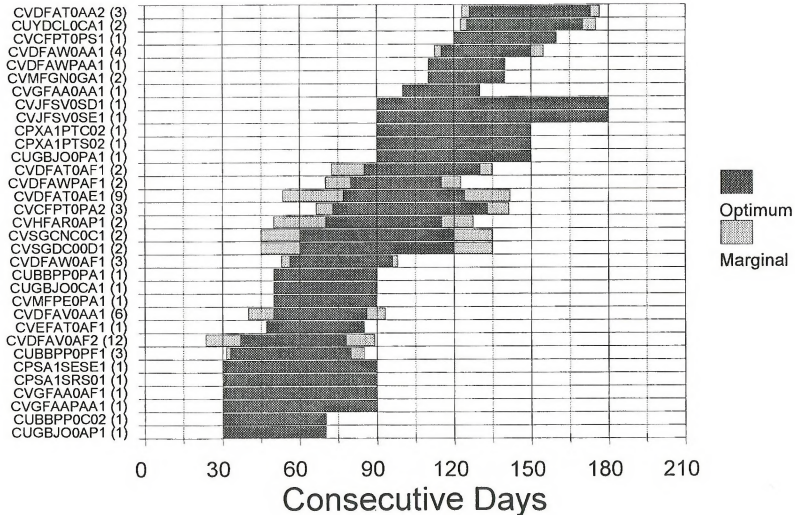
Slope and Aspect (MLRA B9)



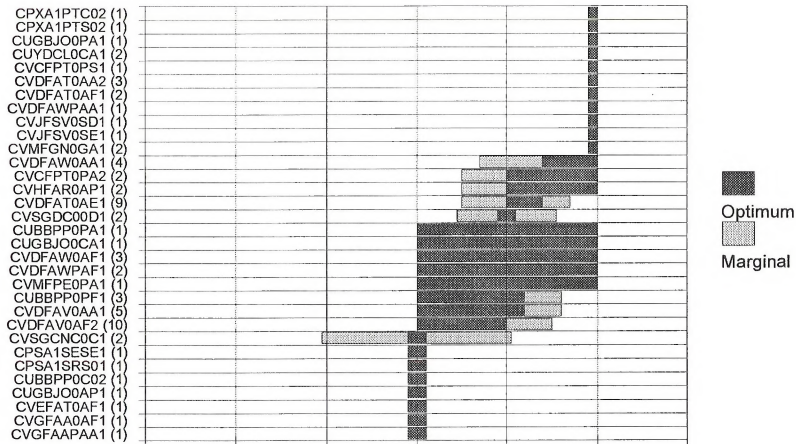
Precipitation (MLRA B10)



Frost Free Period (MLRA B10)

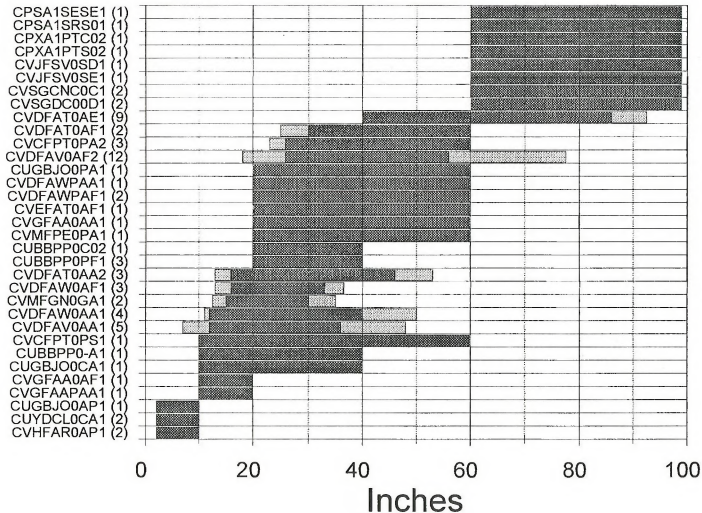


Soil Temperature Regime (MLRA B10)



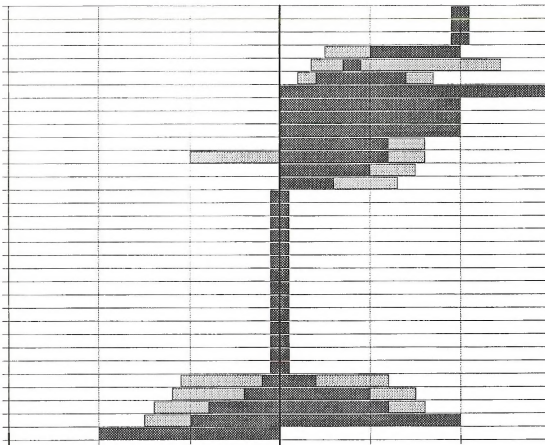
Soil Depth (MLRA B10)

100



Soil Texture (MLRA B10)

CPSA1SESE1 (1)
 CUGBJO0AP1 (1)
 CUGBJO0PA1 (1)
 CVDFAT0AF1 (2)
 CVDFAT0AE1 (9)
 CVDFAW0AA1 (4)
 CVGFAA0AA1 (1)
 CUGBJO0CA1 (1)
 CVGFAA0AF1 (1)
 CVGFAAPAA1 (1)
 CVDFAT0AA2 (3)
 CVDFAW0AF1 (3)
 CVSGCNC0C1 (2)
 CUBBPP0PF1 (3)
 CPSA1SR01 (1)
 CPXA1PTC02 (1)
 CPXA1PTS02 (1)
 CUBBPP0C02 (1)
 CUBBPP0PA1 (1)
 CUYDCL0CA1 (2)
 CVCFPT0PS1 (1)
 CVEFAT0AF1 (1)
 CVHFAR0AP1 (2)
 CVJFSV0SD1 (1)
 CVJFSV0SE1 (1)
 CVMFGN0GA1 (2)
 CVMFPE0PA1 (1)
 CVSGDC00D1 (2)
 CVDFAV0AF2 (12)
 CVDFAV0AA1 (6)
 CVCFPT0PA2 (3)
 CVDFAWPAF1 (2)
 CVDFAWPAA1 (1)

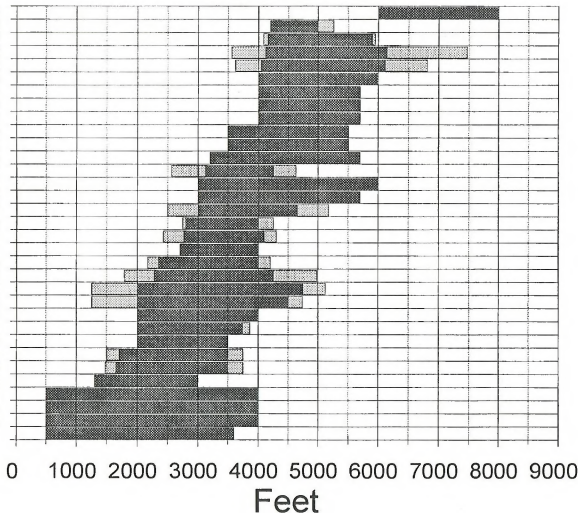


■ Optimum
 ■ Marginal

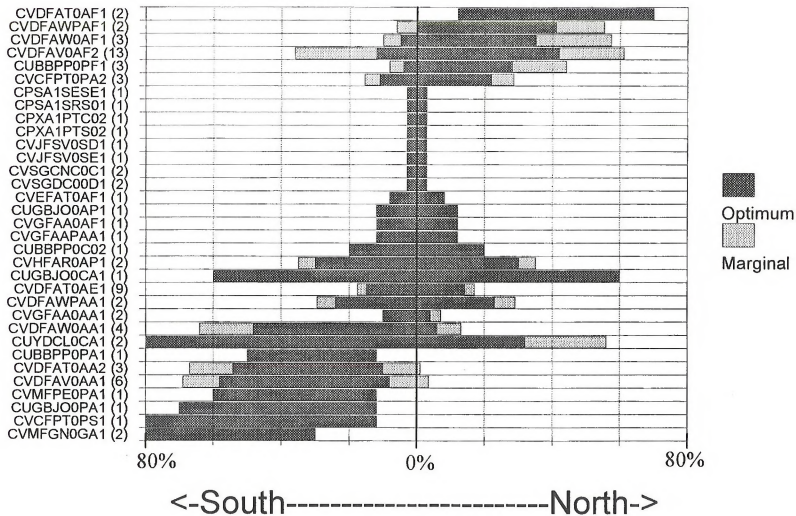
<-Sandy-----|-----Clayey->

Elevation (MLRA B10)

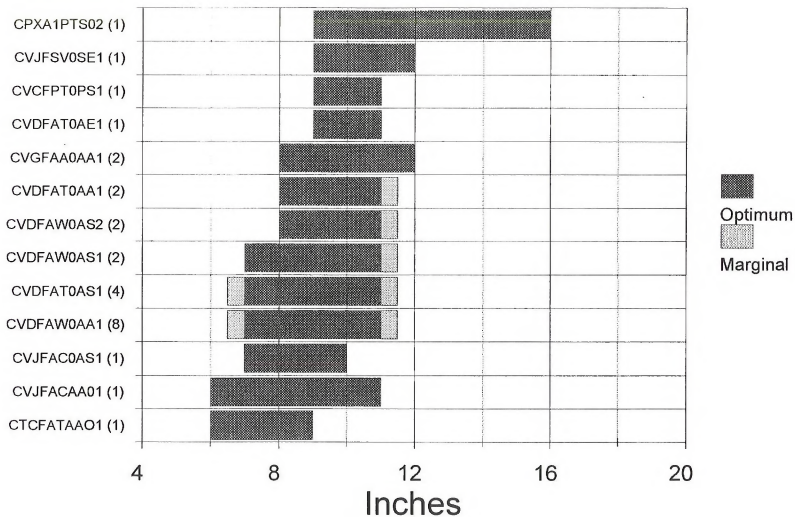
- CVEFAT0AF1 (1)
- CVGFAA0AA1 (2)
- CUBBPP0PF1 (3)
- CVDFAV0AF2 (13)
- CVDFAV0AA1 (6)
- CUBBPP0PA1 (1)
- CUBBPP0C02 (1)
- CUGBJO0AP1 (1)
- CVGFAAPAA1 (1)
- CPSA1SESE1 (1)
- CPSA1SR01 (1)
- CVMFPE0PA1 (1)
- CVDFAWPAA1 (2)
- CUGBJO0CA1 (1)
- CVGFAA0AF1 (1)
- CVHFAR0AP1 (2)
- CVDFAW0AF1 (3)
- CVCFPT0PA2 (3)
- CUGBJO0PA1 (1)
- CVDFAWPAF1 (2)
- CVDFAT0AE1 (9)
- CVSGDC00D1 (2)
- CVSGCNC0C1 (2)
- CVMFGN0GA1 (2)
- CVDFAW0AA1 (4)
- CVCFPT0PS1 (1)
- CVDFAT0AF1 (2)
- CUYDCL0CA1 (2)
- CVDFAT0AA2 (3)
- CPXA1PTC02 (1)
- CVJFSV0SD1 (1)
- CVJFSV0SE1 (1)
- CPXA1PTS02 (1)



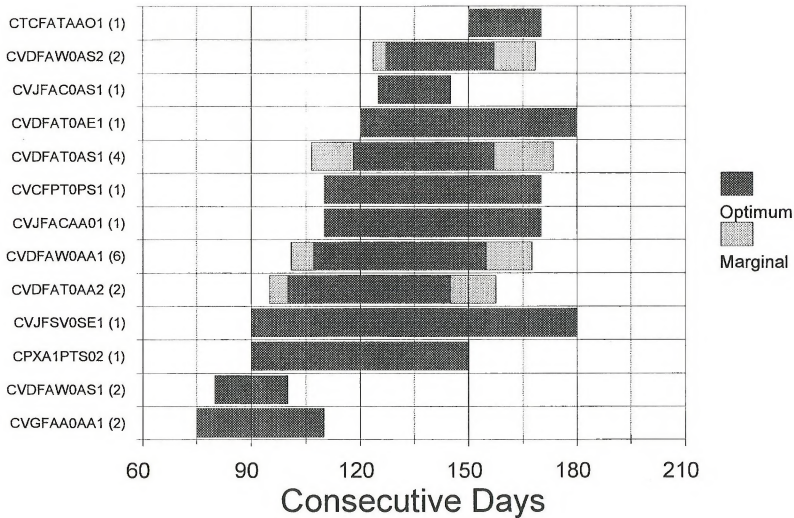
Slope and Aspect (MLRA B10)



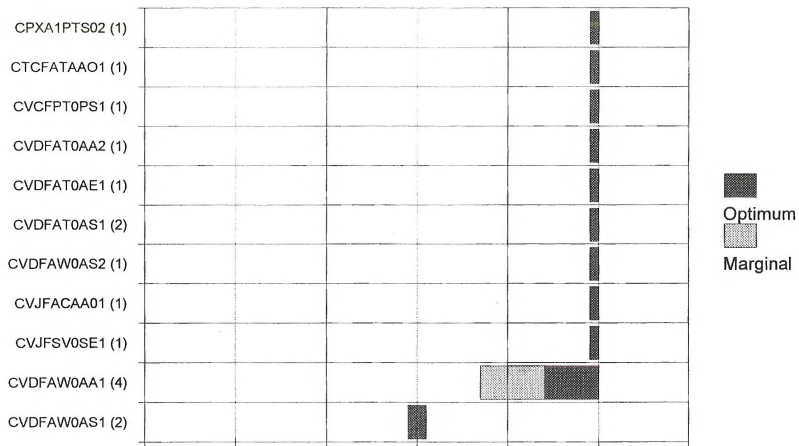
Precipitation (MLRA B11)



Frost Free Period (MLRA B11)

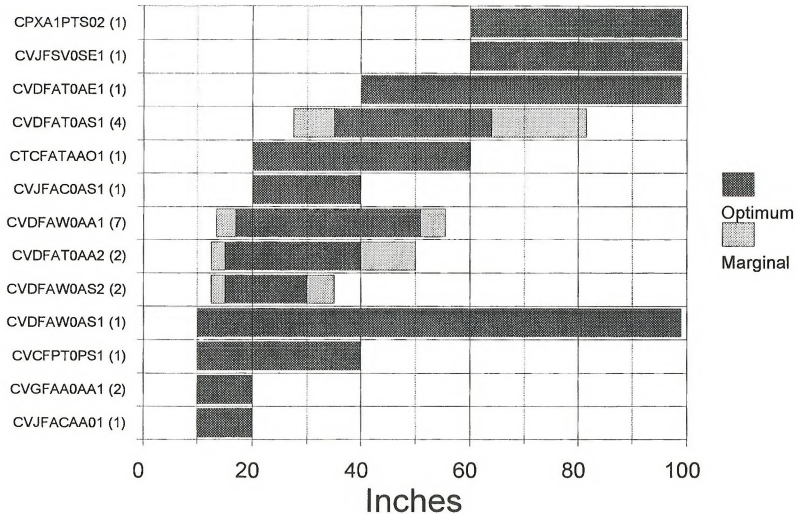


Soil Temperature Regime (MLRA B11)

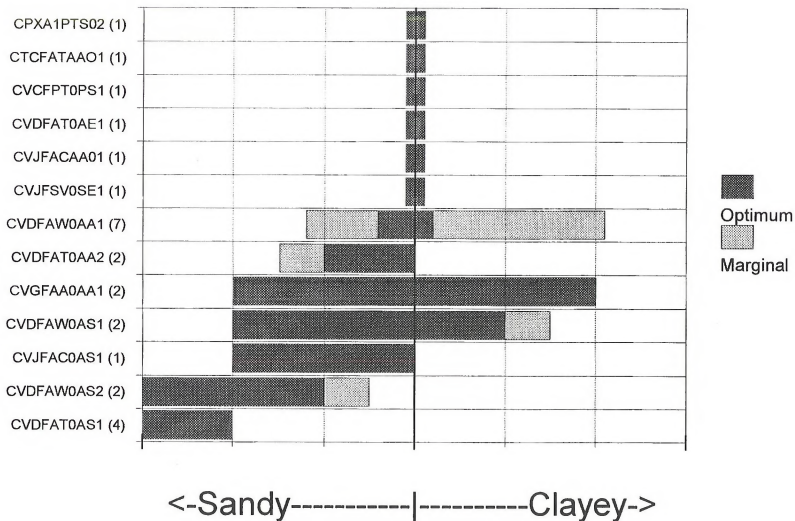


<-Cryic-----Frigid-----Mesic->

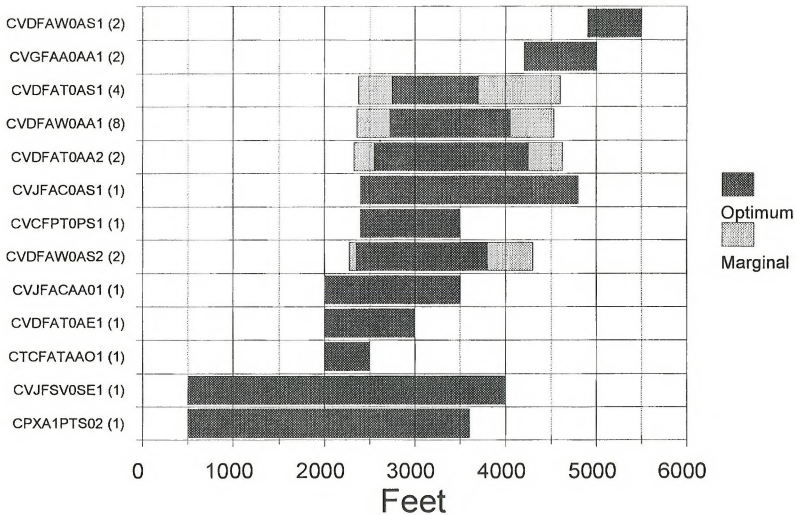
Soil Depth (MLRA B11)



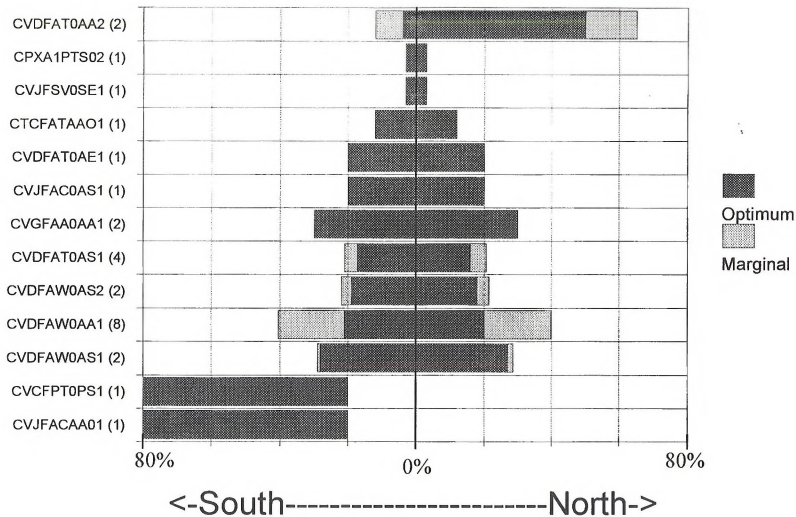
Soil Texture (MLRA B11)



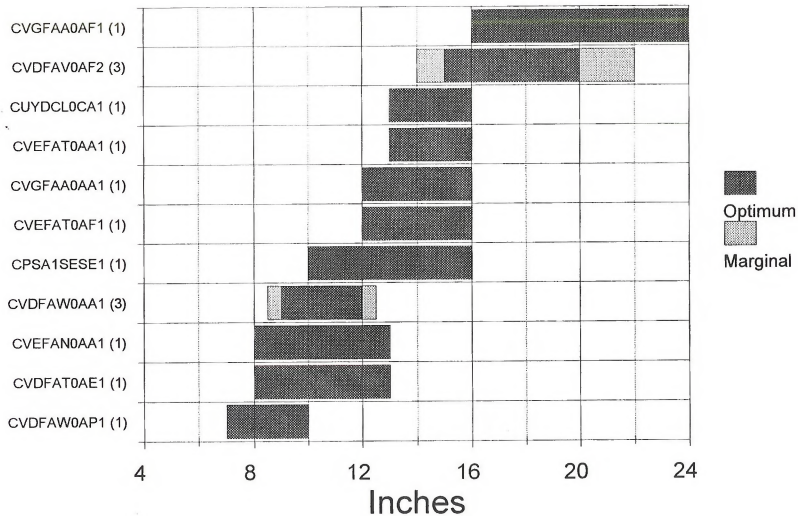
Elevation (MLRA B11)



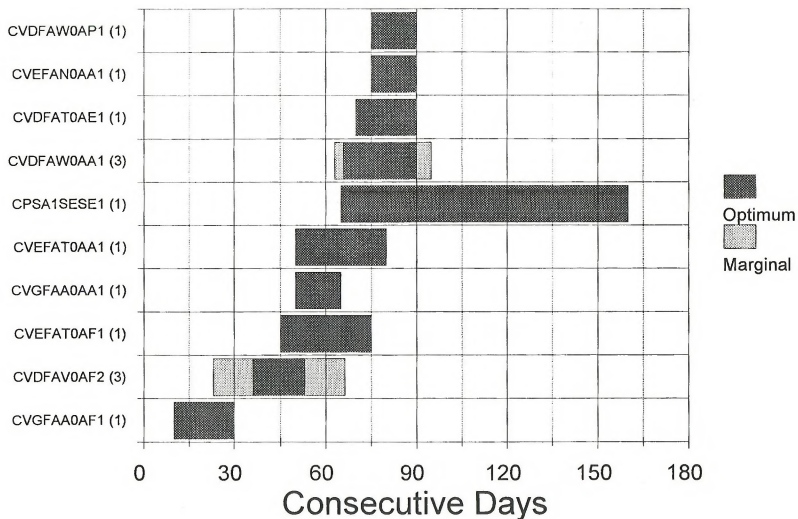
Slope and Aspect (MLRA B11)



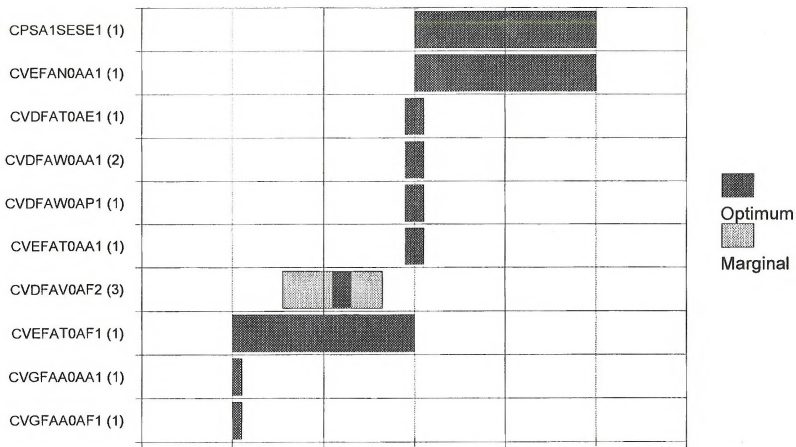
Precipitation (MLRA B12)



Frost Free Period (MLRA B12)

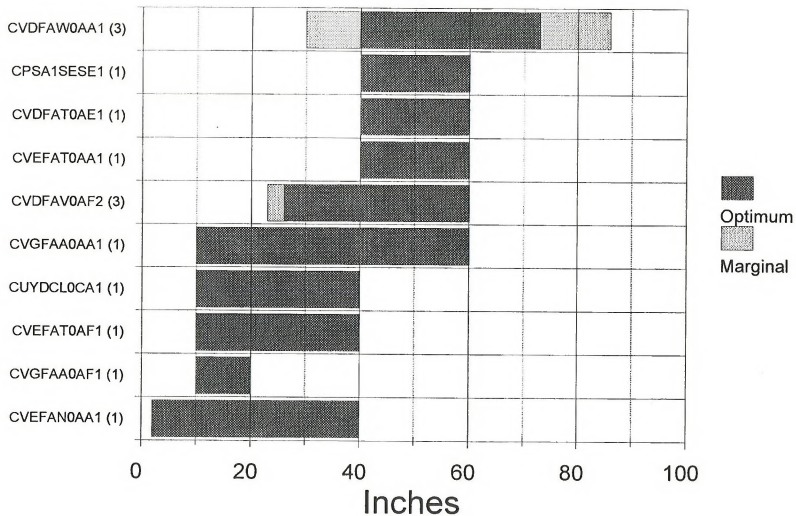


Soil Temperature Regime (MLRA B12)

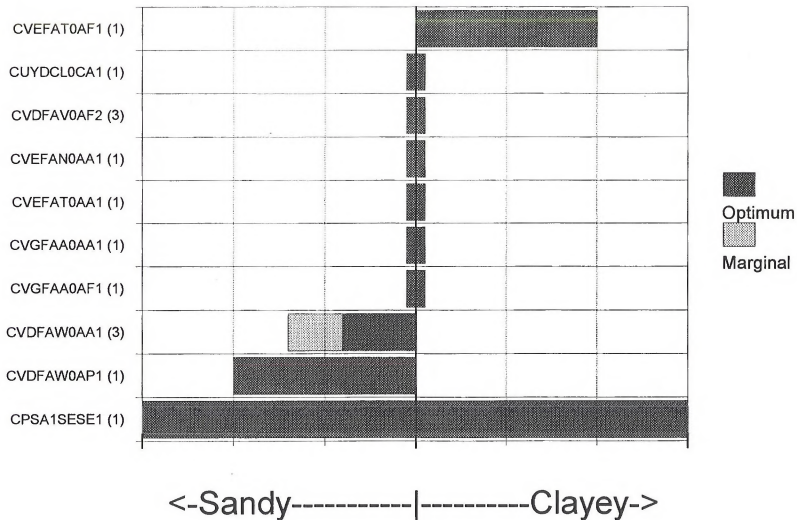


<-Cryic-----Frigid-----Mesic->

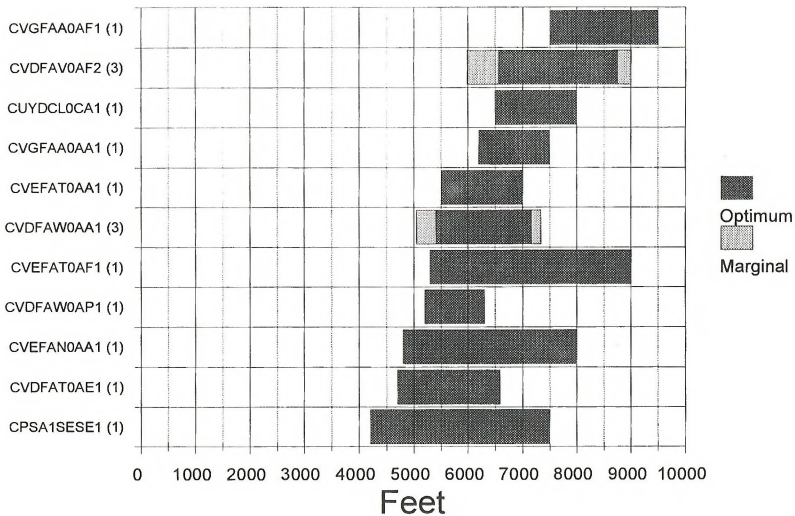
Soil Depth (MLRA B12)



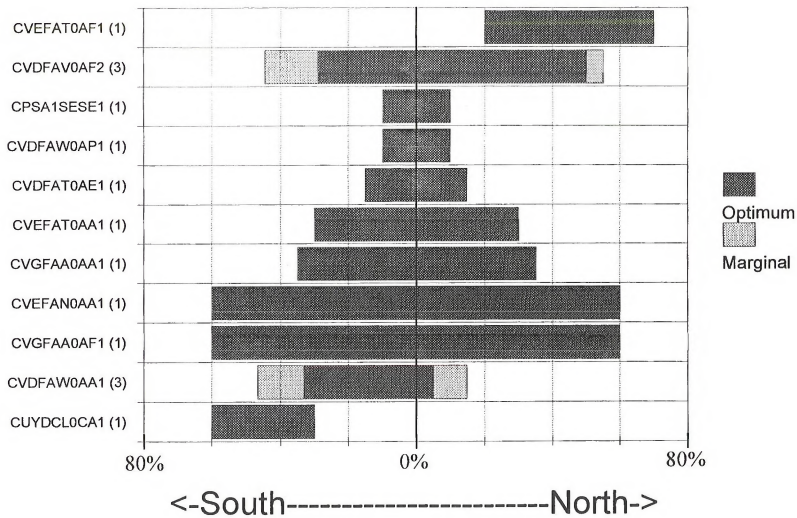
Soil Texture (MLRA B12)



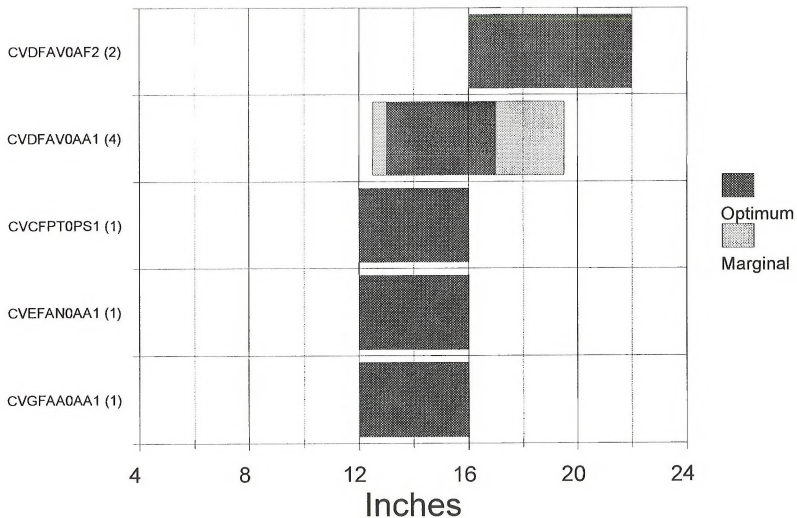
Elevation (MLRA B12)



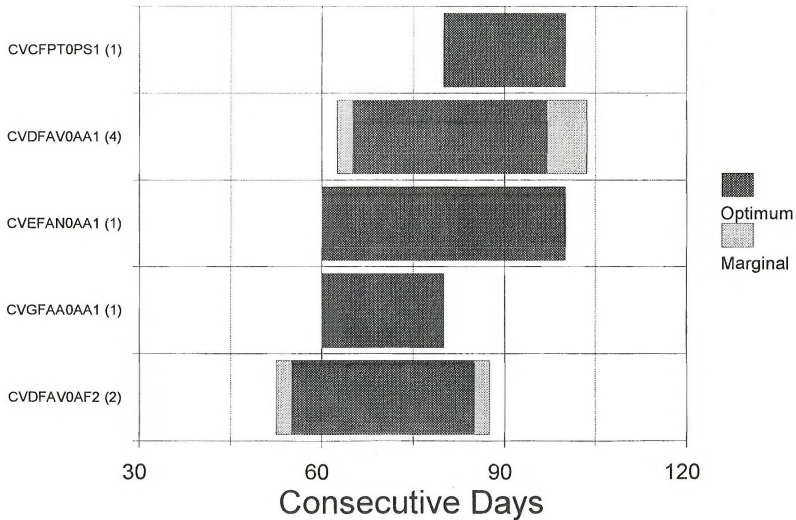
Slope and Aspect (MLRA B12)



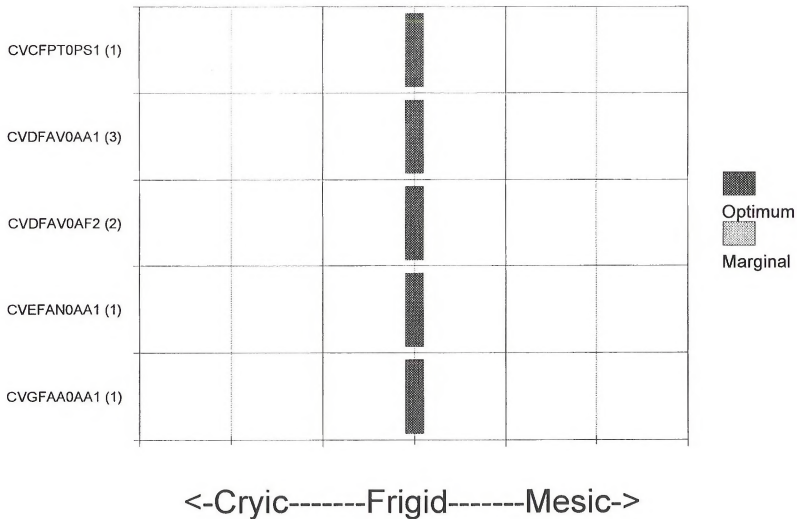
Precipitation (MLRA B13)



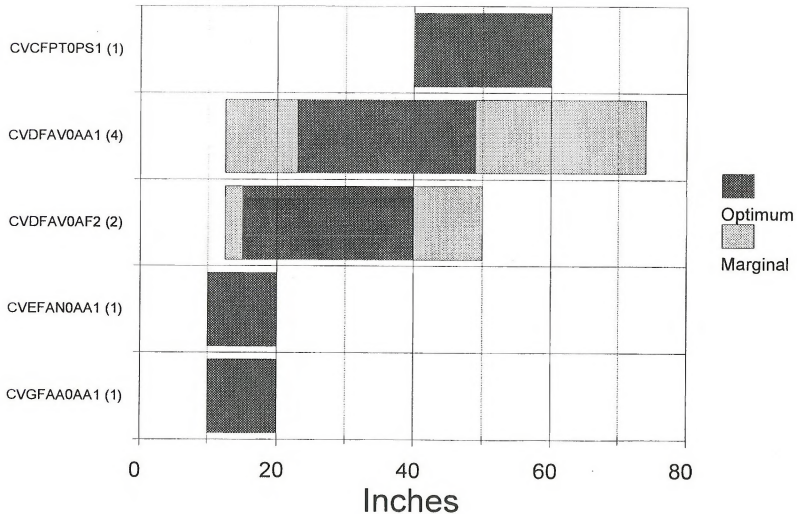
Frost Free Period (MLRA B13)



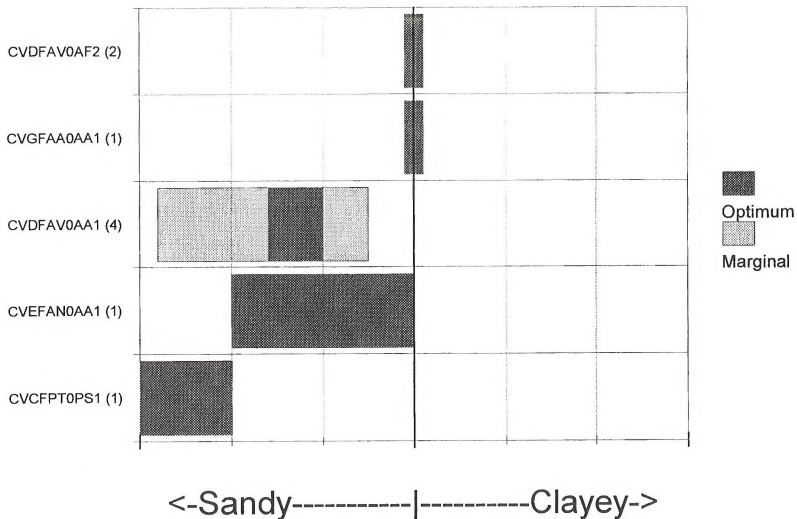
Soil Temperature Regime (MLRA B13)



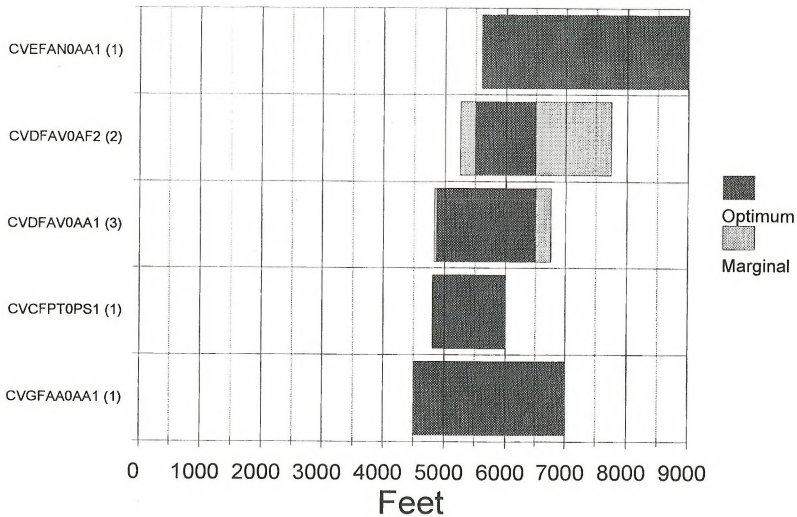
Soil Depth (MLRA B13)



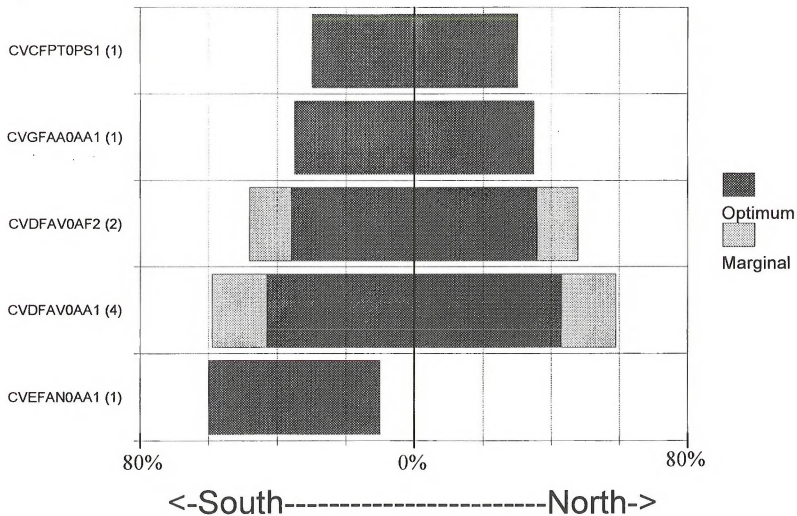
Soil Texture (MLRA B13)



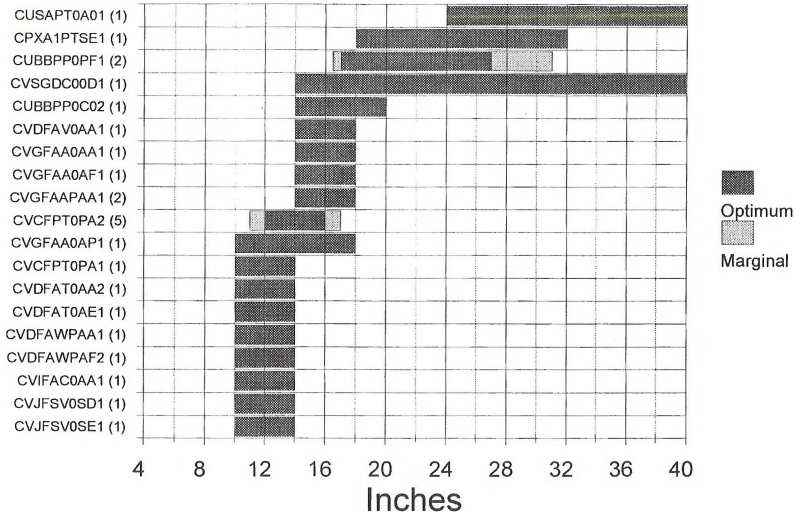
Elevation (MLRA B13)



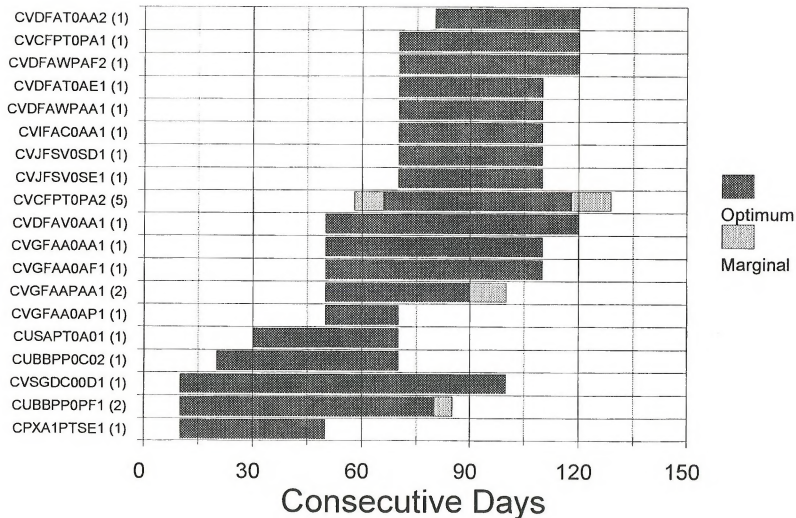
Slope and Aspect (MLRA B13)



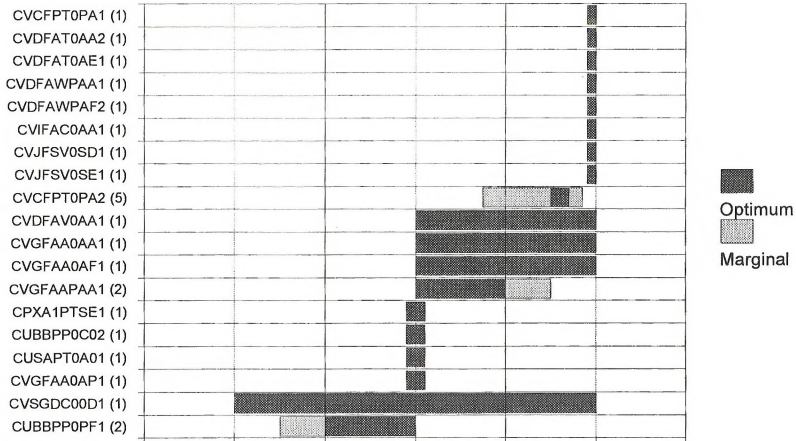
Precipitation (MLRA D21)



Frost Free Period (MLRA D21)

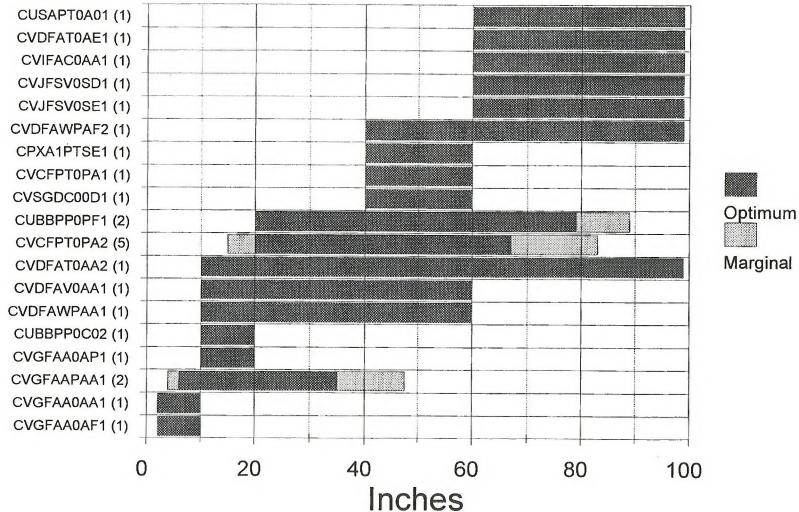


Soil Temperature Regime (MLRA D21)

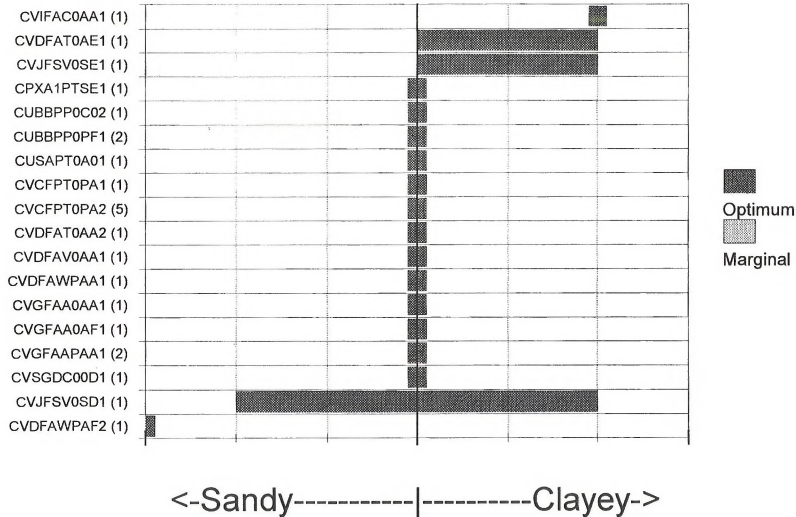


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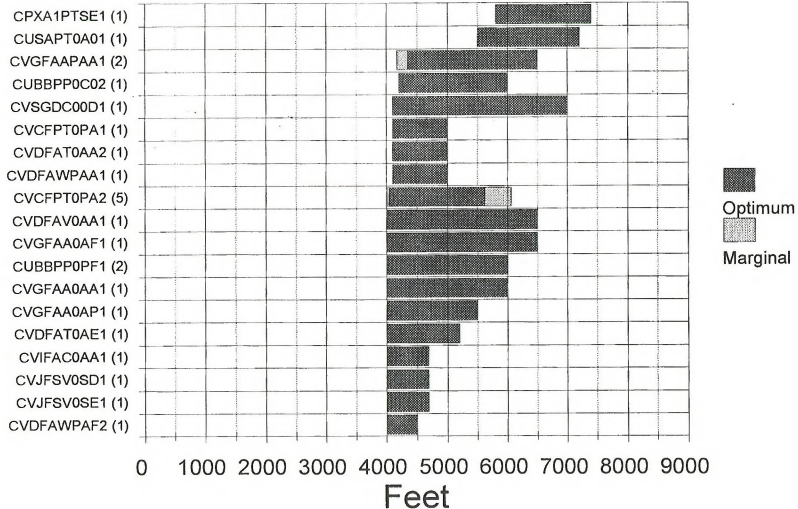
Soil Depth (MLRA D21)



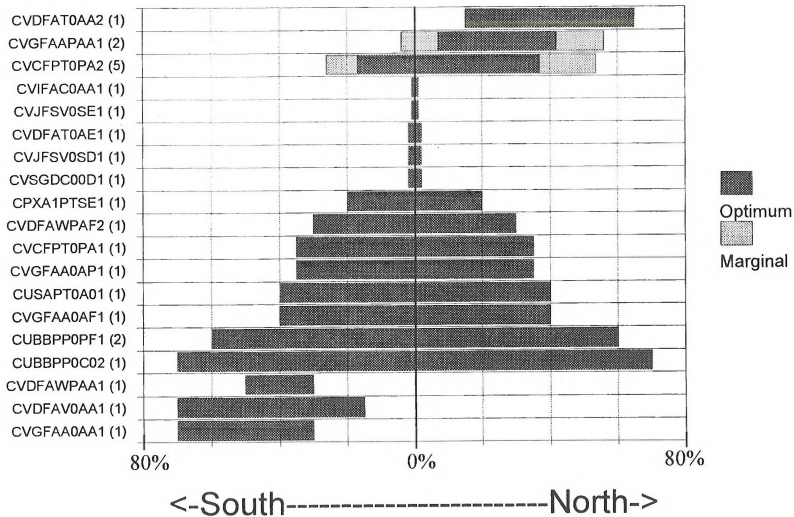
Soil Texture (MLRA D21)



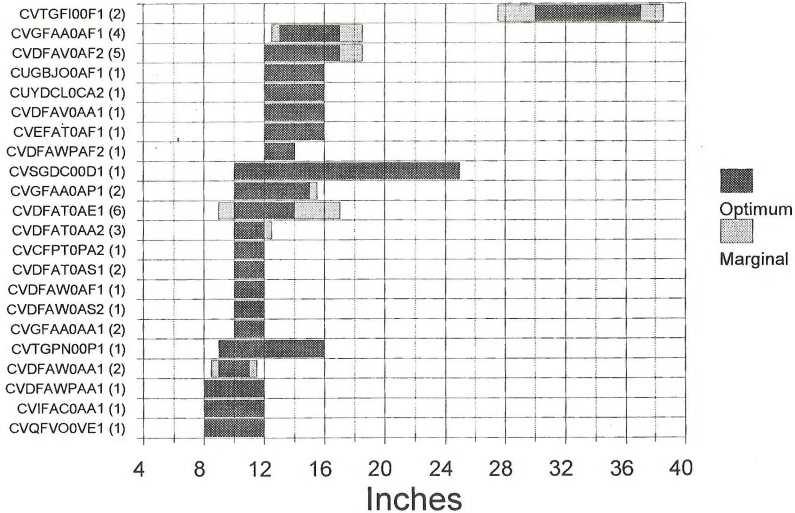
Elevation (MLRA D21)



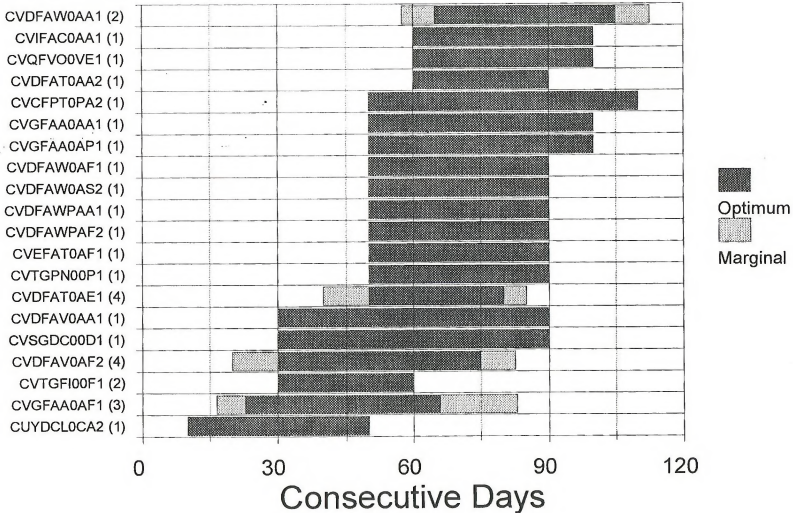
Slope and Aspect (MLRA D21)



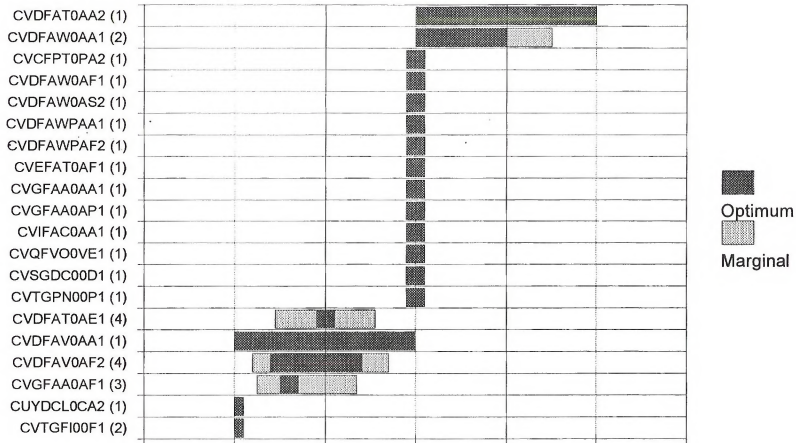
Precipitation (MLRA D23)



Frost Free Period (MLRA D23)



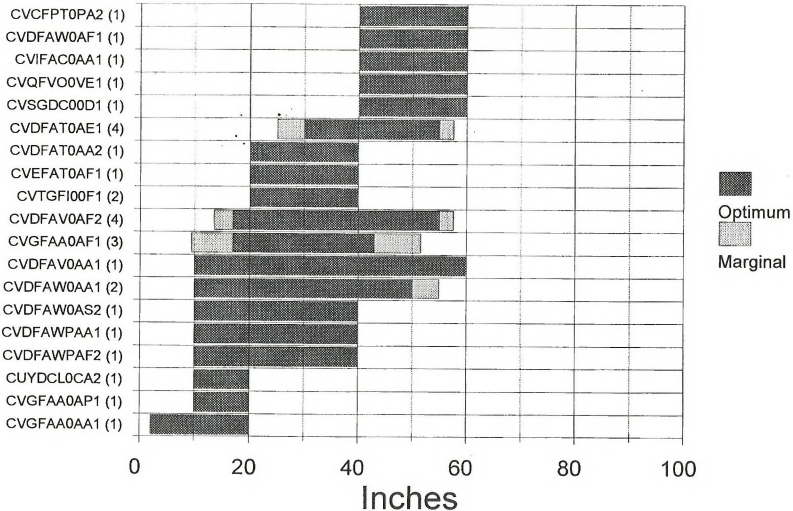
Soil Temperature Regime (MLRA D23)



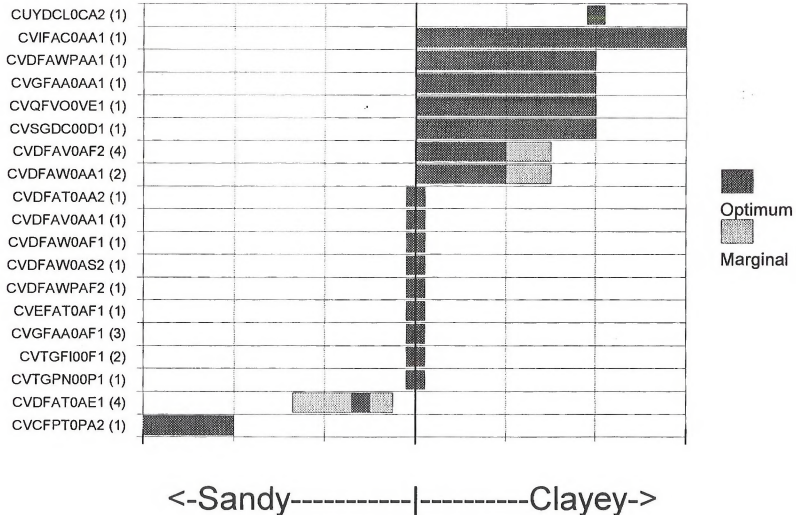
<-Cryic-----Frigid-----Mesic->

Soil Depth (MLRA D23)

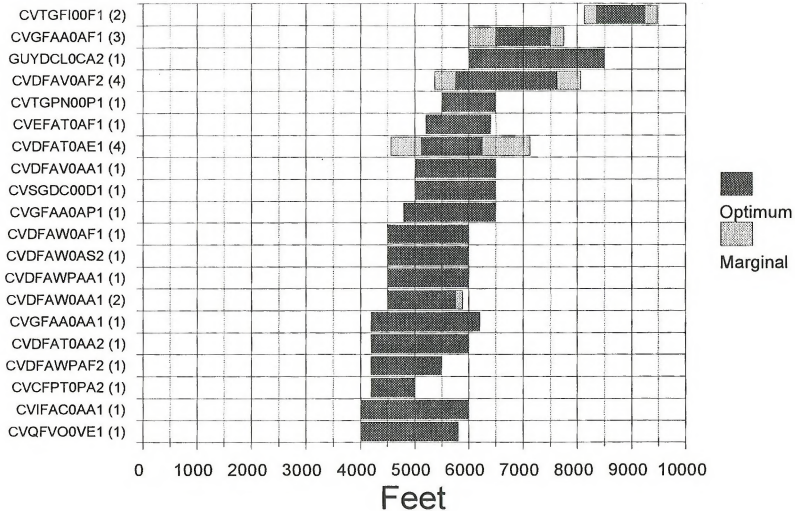
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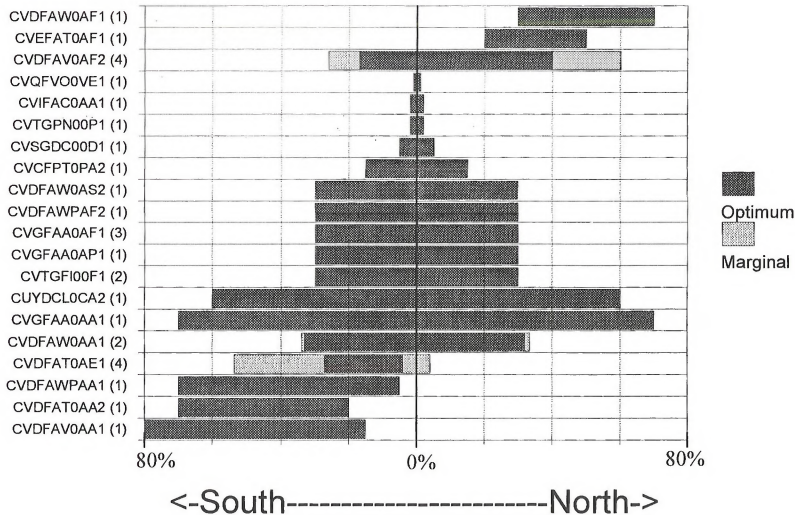
Soil Texture (MLRA D23)



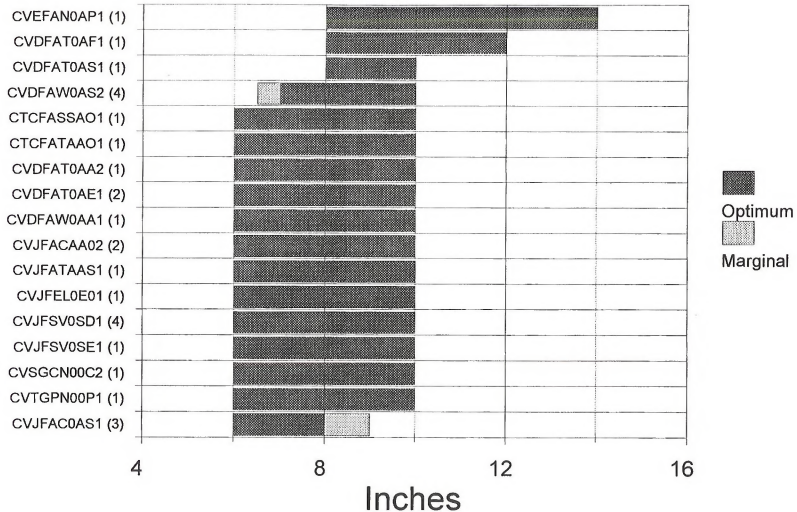
Elevation (MLRA D23)



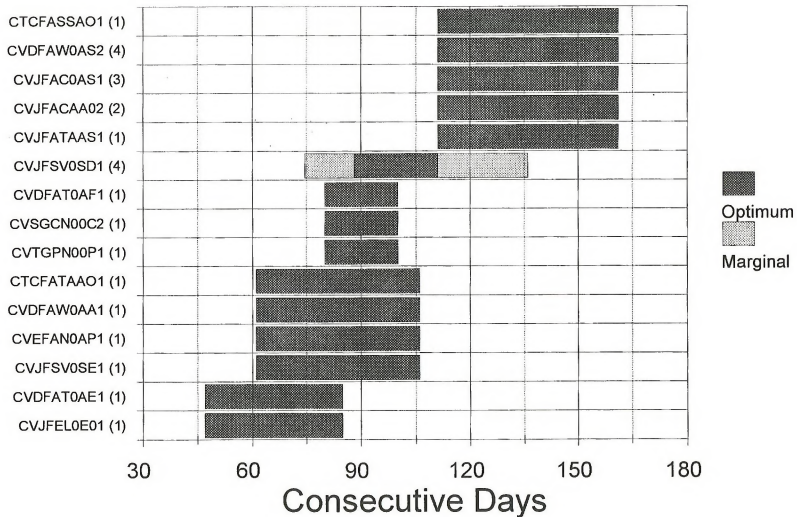
Slope and Aspect (MLRA D23)



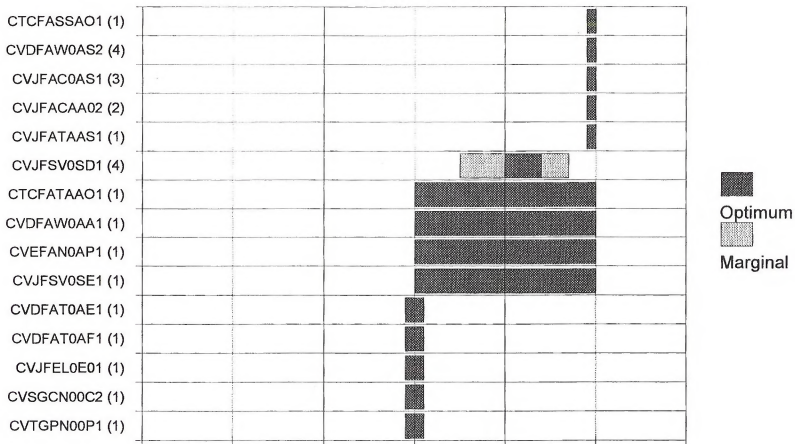
Precipitation (MLRA D24)



Frost Free Period (MLRA D24)

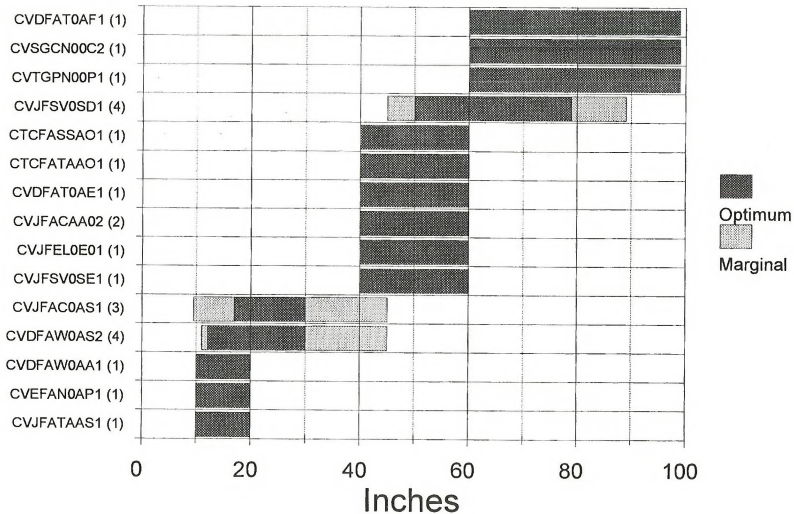


Soil Temperature Regime (MLRA D24)

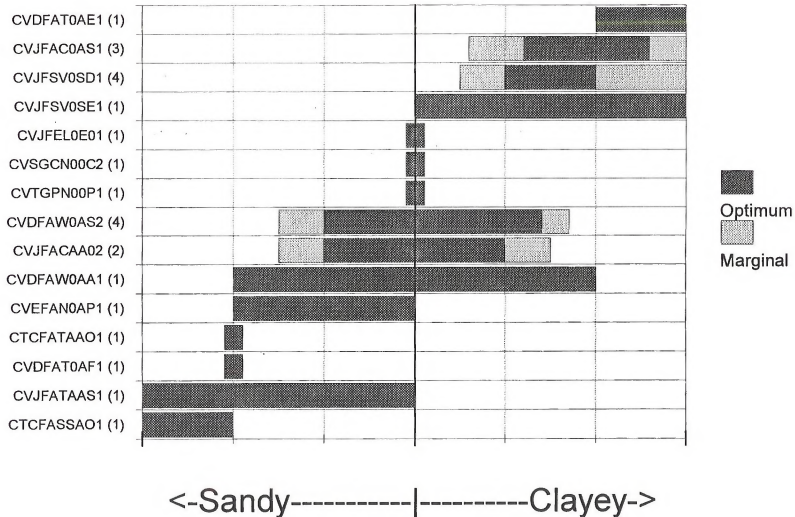


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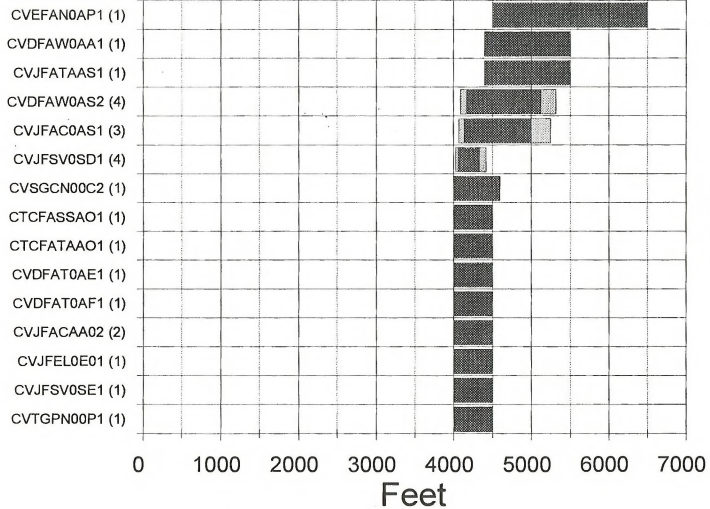
Soil Depth (MLRA D24)



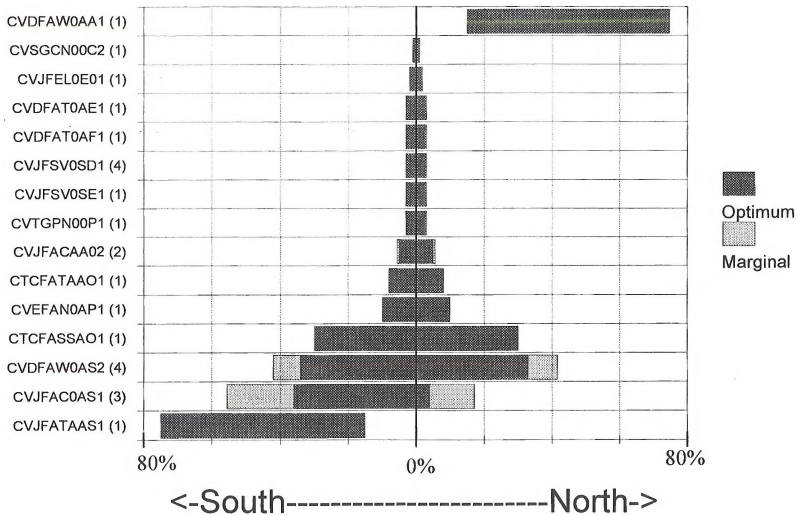
Soil Texture (MLRA D24)



Elevation (MLRA D24)

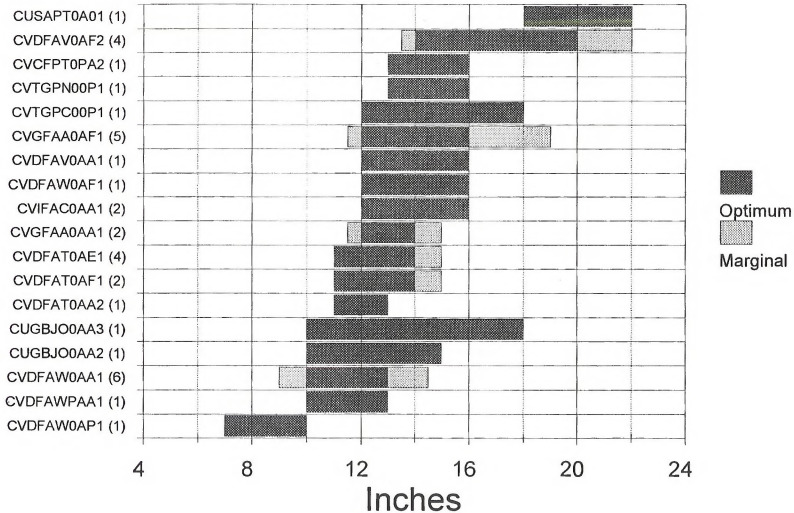


Slope and Aspect (MLRA D24)

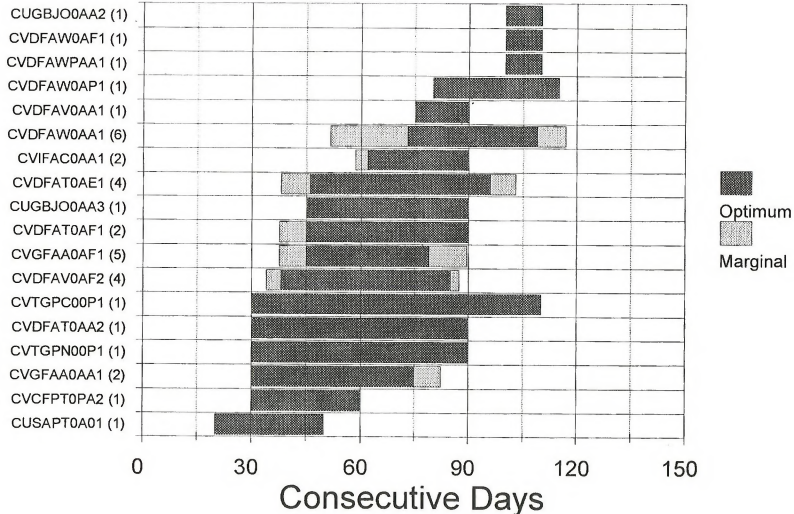


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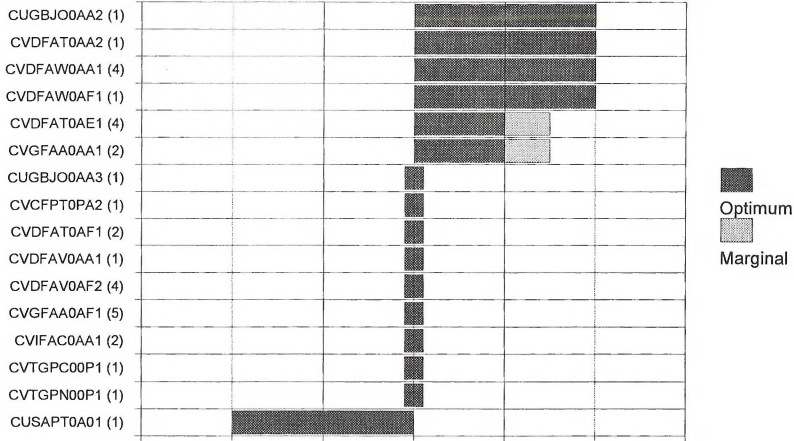
Precipitation (MLRA D25)



Frost Free Period (MLRA D25)

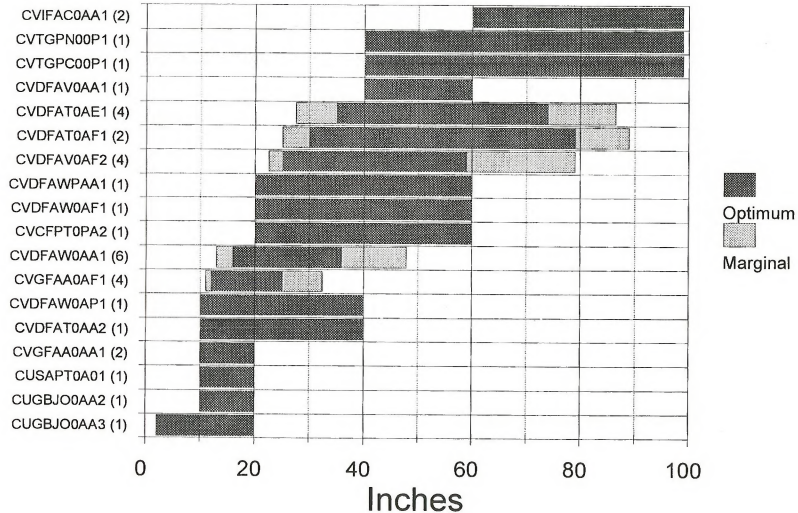


Soil Temperature Regime (MLRA D25)

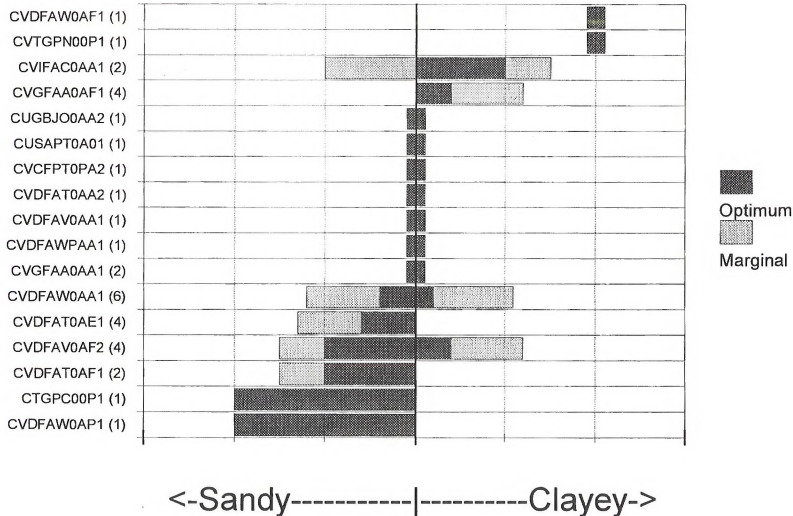


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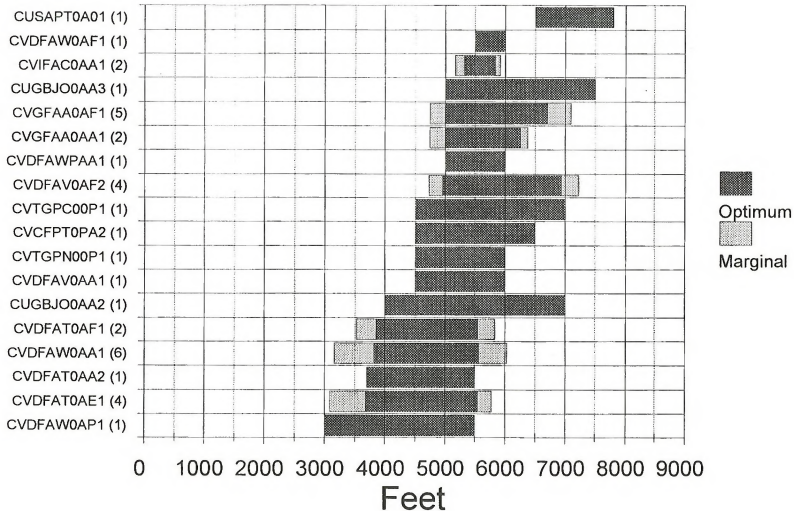
Soil Depth (MLRA D25)



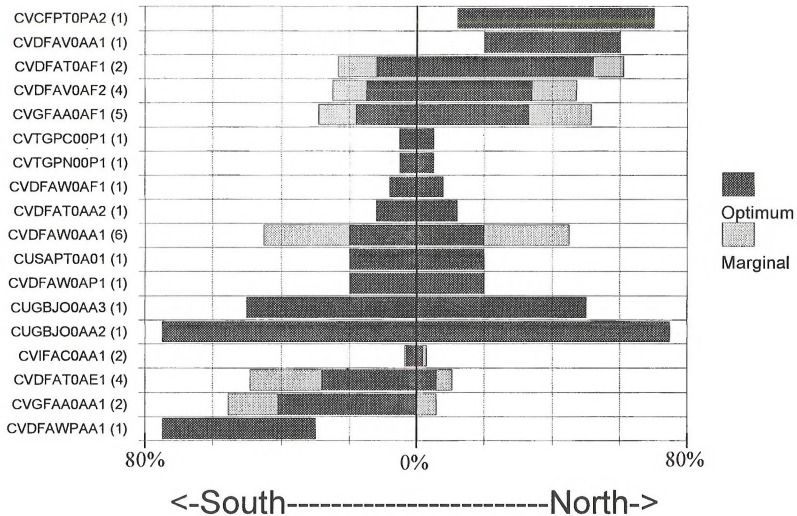
Soil Texture (MLRA D25)



Elevation (MLRA D25)



Slope and Aspect (MLRA D25)



ERRATA: Conversion of old codes used in this volume to new ELCODEs.

<u>Old Code</u>	<u>ELCODE</u>		
CPSA1SBSC1	CEGL001185	CVDFAW0AP1	CEGL001049
CPSA1SESE1	CEGL001197	CVDFAW0AS1	CEGL001051
CPSA1SR01	CEGL001233	CVDFAW0AS2	CEGL001052
CPXA1PTC02	CEGL000676	CVDFAW0AS4	CVDFAW0AS4
CPXA1PTSE1	CEGL000946	CVDFAWPAA1	CEGL001050
CTCFASSA01	CEGL001426	CVDFAWPAF1	CVDFAWPAF1
CTCFATAA01	CEGL001046	CVDFAWPAF2	CVDFAWPAF1
CUBBPP00C2	CEGL000182	CVEFAN0AA1	CEGL001424
CUBBPP00F1	CEGL000857	CVEFAN0AP1	CEGL001423
CUBBPP0A03	CEGL000063	CVEFAT0AA1	CEGL001538
CUBBPP0C01	CEGL000064	CVEFAT0AF1	CEGL001536
CUBBPP0C02	CEGL000850	CVGFAA0AA1	CEGL001412
CUBBPP0PA1	CEGL000197	CVGFAA0AF1	CEGL001409
CUBBPP0PF1	CEGL000195	CVGFAA0AP1	CEGL001411
CUBBPP0S02	CEGL000203	CVGFAAPAA1	CEGL001518
CUBBPP0S03	CUBBPP0S03	CVHFAR0AA1	CEGL001529
CUCBPPPP02	CEGL000214	CVHFAR0AP1	CEGL001528
CUCBPPPS01	CUCBPPPS01	CVIFAC0AA1	CEGL001548
CUGBJO0AA2	CEGL001721	CVJFAC0AS1	CEGL001302
CUGBJO0AA3	CEGL001722	CVJFACAA01	CEGL001040
CUGBJO0AF1	CEGL001716	CVJFACAA02	CVJFACAA02
CUGBJO0AP1	CEGL001718	CVJFATAAS1	CVJFATAAS1
CUGBJO0CA1	CEGL000725	CVJFEL0E01	CEGL001326
CUGBJO0PA1	CUGBJO0PA1	CVJFVS0D1	CEGL001363
CUGBJOPPA1	CEGL001726	CVJFVS0SE1	CEGL001366
CUKCPPPR01	CEGL000884	CVMFGN0GA1	CEGL001100
CUKCPPQP01	CEGL000883	CVMFPE0PA1	CVMFPE0PA1
CUSAPT0A01	CUSAPT0A01	CVMFRWSR01	CEGL001130
CUUACD0S01	CEGL001096	CVQFV00VE1	CVQFV00VE1
CUYDCL0CA1	CEGL000967	CVSGCN00C2	CEGL001813
CUYDCL0CA2	CEGL000968	CVSGCNC0C1	CVSGCNC0C1
CVCFT0PA1	CEGL001495	CVSGDC00D1	CEGL001599
CVCFT0PA2	CEGL001496	CVTGFI00F1	CEGL001897
CVCFT0PS1	CEGL001942	CVTGPC00P1	CEGL001655
CVDFAT0AA2	CEGL001019	CVTGPN00P1	CEGL001657
CVDFAT0AE1	CEGL001016	CVUGASF0A1	CEGL001669
CVDFAT0AF1	CEGL001014	CVUGASF0A2	CEGL001670
CVDFAT0AS1	CEGL001010	CVUGASP0A1	CEGL001678
CVDFAV0AA1	CEGL001030	CVUGASP0A2	CEGL001677
CVDFAV0AF2	CEGL001533	CVWGEDP0E1	CEGL001785
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CVDFAW0AF1	CVDFAW0AF1	CVXGDCC0D1	CEGL001602
		CVXGEC00E1	CEGL001480

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