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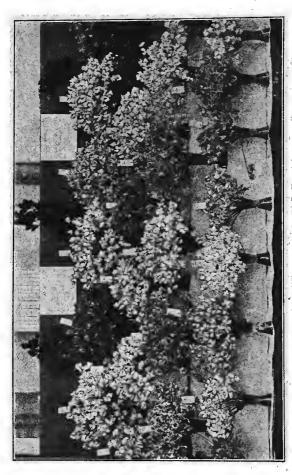
# SWEET PEAS UP-TO-DATE

A N ENDEAVOR HAS BEEN MADE TO GIVE BOTH AMATEUR AND PROFESSIONAL THE BENEFIT OF MORE THAN TWENTY YEARS' EXPERIENCE IN GROWING

THIS FAVORITE FLOWER AT FORDHOOK, FARMS



PUBLISHED IN 1910 BY
W. ATLEE BURPEE & CO.
SEED GROWERS
PHILADELPHIA PENNSYLVANIA



BURPEE'S "GOLD MEDAL" EXHIBIT IN THE R. H. S. HALL, LONDON, JULY 23, 1906.

THE ONLY GOLD MEDAL OF THE NATIONAL SWEET PEA SOCIETY EVER WON by groupers outside of Great Britain was awarded to this exhibit, at the great exhibition in London, July 23, 1909.

# SWEET PEAS UP-TO-DATE

COMPILED BY G. W. KERR

FROM OBSERVATIONS MADE AT FORDHOOK FARMS TRIAL GROUNDS DURING THE PAST TWO SEASONS AND PREVIOUS EXPERIENCE IN ENGLAND



COUNTESS SPENCER SWEET PEA.

Grown by James W. Nairn, Truro, Nova Scotia, who sends the charming photograph from which this engraving has been reproduced.

# SWEET PEAS UP-TO-DATE

WITH A COMPLETE DESCRIPTION OF ALL KNOWN VARIETIES, IN-CLUDING NOVELTIES FOR 1910

COMPILED BY G. W. KERR



W. ATLEE BURPEE & CO. SEED GROWERS, PHILADELPHIA

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### **PREFACE**

For some time past we have been collecting all data and information available with a view to revising our book "ALL ABOUT SWEET PEAS," at the same time testing all the novelties (sometimes prior to their introduction): therefore, the lists of varieties as given in this publication are "Up-to-date" as far as it is possible to make them at the time of writing.

In 1893 when "ALL ABOUT SWEET PEAS" was published we were astonished at the demand for literature pertaining to the culture, history, etc., of Sweet Peas. This book was read probably by nearly two hundred thousand planters.

As is well known, at Fordhook Farms we maintain the largest trial grounds in America, the trials of Sweet Peas alone generally covering over two acres. All novelties are tried side by side with the best of the older varieties, and thus the truth is learned as to which are really the best and worthy of general cultivation.

We have recently added to our staff Mr. George W. Kerr, who has had many years' experience in England, both in the growing and exhibiting of Sweet Peas. Of his own knowledge and with the help of the notes from the Fordhook trial books, he has entirely revised our former publication,—so that the information contained herein is thoroughly "Up to date."

No flowers are more easily grown than are Sweet Peas, and although you may be a novice, success is reasonably sure if you carefully follow the cultural directions given in this book.

W. Atlee Burpee & Co.

Fordhook Farms, December 15th, 1909.

# INTRODUCTION

"The Sweet Pea has a keel that was meant to seek all shores; it has wings that were meant to fly across all continents; it has a standard which is friendly to all nations; and it has a fragrance like the universal Gospel: yea, a sweet prophecy of welcome everywhere that has been abundantly fulfilled."

So said the Rev. W. T. HUTCHINS, the well-known Sweet Pea enthusiast, when attending the Sweet Pea Bi-centenary Celebration in London in 1900; and his words almost sound like a prophecy,—a prophecy that has indeed been abundantly fulfilled.

As far as we can learn the Sweet Pea is a native of Sicily, and we read that in 1699 FRANCISCUS CUPANI, an Italian monk, sent seeds to England, and so was begun the culture of Sweet Peas.

Although there were several distinct colors in cultivation, no great advancement was made until the late Henry Eckford of Wem, Shropshire, England, in 1870 started his great life work on Sweet Peas. Since then the development of this lovely and fragrant flower has been one of the floral wonders of the age.

The late Thomas Laxton of Bedford, England, also worked on the improvement of the Sweet Pea, starting in 1877. His *Invincible Carmine* was certificated in 1883, being the first recorded result of cross-fertilization, and since then many florists have assisted in carrying on the improvement of the Sweet Pea, America being to the front as usual, many charming and refined varieties being distributed by W. Atlee

BURPEE & Co. and other American seedsmen, and quite three-fourths of the Sweet Pea seed used each year all over the world is grown in this country.

Had any one ten years ago said that the Sweet Pea would become within the next few years the most popular flower of the day, he would have been laughed at, and yet this has become an accomplished fact.

I can well remember when the first "Sweet Pea Show" in England was planned (that was some nine years ago). Although I was a great admirer of the Sweet Pea and had seen and grown all the new varieties as they were introduced, I simply laughed at the idea of holding a show of Sweet Peas alone—and I was only a unit among the many scoffers at the project. But, thanks to those at the helm, the first show at the Crystal Palace, London, was held, and turned out to be such a success that since that year, 1900, the Sweet Pea Society has held its annual Show, and now the National Sweet Pea Society is among the most flourishing of the "one flower" societies; and it is impossible to describe to those who have not attended any of their exhibitions the enthusiasm which prevails among the exhibitors, the immensity of the Show and the exquisite exhibits from the trade growers: flowers of the largest size with stems eighteen inches to two feet long, the long lines of decorated tables, and, last but not least. the novelties. Of course, the novelties are not all gems of the first water, but no Show passes without some great improvement in color or form appearing. The Aquarium Show of 1901 will long be remembered, as it was there that Silas Cole of Althorp Gardens, Northampton, first exhibited his glorious "Countess Spencer," which was three years later introduced by MR. ROBERT SYDENHAM of Birmingham. The "Countess Spencer" was such an improvement in size and of a form so distinctly new, the immense standard and wings being beautifully frilled and waved, that it created a perfect sensation at the Show, but since the advent of its introduction in 1904 the new waved or orchid-flowered varieties have been added to considerably, and these are practically all sports from the popular Countess Spencer.

The first "Spencer" sports to appear were John Ingman and Helen Lewis, followed by Mrs. Charles Foster and Mrs. Charles Mander. (These two varieties are still not quite fixed and it may be a year or two ere they are listed generally.) Since then many new colors have been found, a list of which is given on page 27.

About the same time that Mr. Cole brought out Countess Spencer, W. J. Unwin of Histon, Cambridge, also found a sport in Prima Donna, and this he called *Gladys Unwin*. It is also of the wavy type and of much the same shade of pink as Countess Spencer, but the flowers do not come quite so large; and now from Gladys Unwin we have another family of lovely form, a list of which is given on page 38.

The merest novice in gardening realizes that the Sweet Pea is the most popular annual now cultivated, and this is not to be wondered at when we consider all its qualities: first, there is the primary question of cost, when for a few cents we can have a row right around our garden or clumps among our shrubs—and what other flower will give us such glorious results so cheaply? Then, as to cultivation. The Sweet Pea will succeed in practically any good garden soil, though extra cultivation will well repay the grower. And,

again, what flower gives us such a multitude of exquisite colors and shades of colors combined with such delicate and thrilling fragrance as our "Queen of All Annuals"—the regal Sweet Pea? And yet another great quality in its favor is that the more flowers you cut from your vines, the longer and more continuously will the plants continue to bloom. In fact, by not allowing any seed pods to set, followed up with high-class cultivation, Sweet Peas will continue to flower for quite three months, and in some locations even longer.

G. W. KERR.

Fordhook Farms, December 15th, 1909.

# SOIL AND PREPARATION

Any ordinary garden soil will suit Sweet Peas, provided the following points are observed:

FIRST. The ground should be drained or the soil be of such a nature that in a season of excessive rains the water will not lie and so cause the roots to rot, or start mildew among the plants.

SECOND. The seeds should be planted in such a position that no excessive shade shall interfere with the sturdy growth of the vines, as too much shade encourages a spindly and weak vine, with few, if any, flowers. You should choose, therefore, a spot in your garden right in the open, where your plants may have all the available light and air, though a little shade from the scorching mid-day suns of June and July will be found most beneficial.

Soils cultivated and prepared as for your vegetable plot will give fair results, but for this, the Queen of all our annual plants, a little extra care and selection of soil will be well repaid by the additional size of flower, longer stems, better color, and prolonged period of blooming.

Whatever may be the composition of your soil, a start should be made in the fall of the year by trenching it to a depth of from two to three feet. Should the subsoil be poor, it would be absurd to bring it to the surface, but it should be broken up, turned over, and mixed with any old garden refuse or stable litter. Place a good layer of half decayed stable or cow manure—the latter for preference if the soil is light—

between the second and top spits (spade full), adding a good dressing of bone meal as the work proceeds. The top spit should be filled in as rough as possible, and left so all winter, that the frost, snow, and rain may have a better chance of exerting their mellowing influences upon the soil. Should the under spits be very light, I would recommend that it should be taken out of the trench and replaced with soil of heavier substance.

If the land is very heavy, with a clay subsoil, long stable litter and rough material from the garden rubbish heap should be incorporated with the subsoil which is broken up, as this will help materially to drain and sweeten the trench, and stable manure, road sweepings, and wood ashes will help to lighten the top spits, adding bone meal as recommended above.

While on the subject of trenching, we ought to explain that where the Sweet Peas are to be planted in rows the trench should be taken out two feet wide and the rows should be five feet apart.

As soon as the frost is out of the ground in early spring and the soil is in a nice, dry condition, the rows should have a fairly heavy coating of superphosphate of lime, which can be forked or raked into the soil and all made ready for planting. Care should be taken that the soil is not too loose, as in this condition it would be apt to dry up quickly during the summer; therefore, if it is loose and open, get it consolidated by forking and treading, but do not attempt to work the trench until it is quite dry.

Soils deficient in lime will be greatly benefited by a good dusting of fresh lime put on in the fall or winter, using it as soon as slaked. On ground that has been heavily manured for some years this application will be found most useful, as it combines with the organic matter contained therein, thereby setting free much plant food that was not previously available to the crops.

Where it has been found impossible to trench the ground in the fall, this operation should be commenced as early as possible in the spring, but in this case only old, well decomposed manure should be utilized, using bone meal and superphosphate of lime as recommended above.

A point to be observed is that the center of the trench should be about three inches lower than the ground level, as this will greatly facilitate watering.

## SOWING AND PLANTING

To those who want the very best results we say plant your Sweet Pea seeds in pots. This should be done in January or February, according to location, using pots of three and one-half or four inches diameter. A suitable compost for this might consist of turfy loam, leaf soil, and a little sand, all thoroughly mixed. A little of the roughest of the turf should be placed on top of the crocks to insure perfect drainage, afterwards filling the pot to within an inch and a half or so of the top. Four seeds will be quite sufficient for each pot, covering them with an inch of soil, making all firm and labelling each variety as it is sown. The pots should be then placed in a frame or cool greenhouse as near the light as possible, so that the growth will be kept sturdy and dwarf. The frame or greenhouse bench on which the pots are to stand should be thoroughly cleaned and afterwards given a thorough dusting of soot or lime

to kill all insects, or keep them at bay. When the young vines are two or three inches tall, insert a few twigs in the pots to keep them in an upright position.

After the first thorough soaking to settle soil and seeds, great care should be taken not to overdo the subsequent waterings, as in the event of sharp frosts, should the Peas be in an unheated structure, there is always the danger of the young plants getting frosted. In severe weather the careful grower will always see that the frame is covered and protected from night frosts.

When the young plants are well through the soil, air should be given on all favorable occasions, and if the plants have been started in heat they should be now removed to a cold frame. As spring advances the sashes should be entirely removed during the brightest part of the day, keeping them off night and day as "planting out time" approaches. According to locality and weather conditions prevailing at the time, the young plants should be put out from early March to early May.

One pot will be found sufficient to form a good clump, and some growers favor this method of growing Sweet Peas—the ground for the clump having been prepared by taking out the soil to a depth of about three feet by three feet and preparing it as before explained for the row system.

When planting in rows each potful should be planted about eighteen inches apart in the row. Place the entire ball of soil with plants and twigs—taking care to keep all intact—in the hole previously prepared for its reception. If the plants are well watered the day before planting, the ball of soil will be more likely

to remain entire when knocked out of the pot. Should the weather be very dry at the time of planting, it may be found advisable to give the newly transplanted vines a thorough watering, and this will likewise help to settle the soil about the roots.

A good ring of soot (which should be collected during the season from the stove-pipe) put on the soil round the plants will now be of the greatest possible benefit in warding off insects, and even a slight dusting of the same material over the young vines has been used also to advantage.

#### SOWING OUT OF DOORS

Those who have not the conveniences—or, perchance, think it too much trouble—for the pot method of Sweet Pea culture should plant the seeds as early in the spring as soil and weather conditions will allow. Whether the ground has been prepared as advised in a previous chapter or simply dug over one spit deep, the procedure is the same.

A small trench or furrow about four inches deep should be taken out and the seed sown evenly, using about one ounce of seed to a fifteen-foot row,—covering with two inches of soil. After covering make the surface soil fairly firm and finish all by putting a good dusting of soot along the row, as this will keep away birds and insects.

When the seedlings are about two inches high, thin out the young plants, leaving one to every six inches, as this will be found quite sufficient to give you a good thrifty row, allowing the air and light to circulate freely among the growing vines, giving more room to the gross feeding and deep searching roots, the natural

results being larger flowers, longer stems, better color, and more flowers. As the young vines grow, the soil should be hoed up to them on either side, thus strengthening the plants and keeping them in an upright position, while the slight trench thus made on either side of the row is of great benefit when watering the plants during a dry spell, or, on the other hand, it acts as a natural drain in carrying off the superfluous moisture during a very wet period. The rows should be staked now, as it is of great importance that the young vines be supported from their earliest stage, but this will be dealt with in a subsequent paragraph.

While we are on the subject of sowing, it would be incomplete were we not to mention Fall planting. For early bloom Fall or Autumn planting is to be recommended if your latitude will allow of it. This method is largely carried out in many parts of England with best results. In the Southern States this operation may be done towards the end of October, while for this locality (Philadelphia) we have proved that November and early December plantings give the most satisfactory results. Our experiments at Fordhook FARMS have shown that Sweet Peas sown in early October made growth about three inches tall before severe weather set in, and that subsequently the plants were frozen out, while seed sown in November and early December just started to germinate before frost, and as there were no top growths to freeze, withstood the winter and started away strongly with the first mild weather in March, the earlier varieties showing flower on May 15th, while the ordinary varieties of grandiflora and Spencer types were in full bloom early in June.

These experiments in Fall planting seem to show

us that we ought to aim at sowing the seed at as late a date as possible, that the seed may lie dormant all winter and so be ready to take advantage of the earliest mild days of spring, long before we could get on the ground to make early plantings.

The advantages of Fall plantings are early flowering and, on account of the slower growth in the early stages, a much stronger root growth which will carry the plants safely through periods of drought and so secure an extended flowering season.

#### STAKING AND TRELLISING

A great diversity of opinion prevails over the question of the most suitable material for staking Sweet Pea vines. According to the NATIONAL SWEET PEA Annual for 1907, the opinions of fifty-two experts were asked, forty-seven of the number voting for sticks, most of them regarding hazel brush as being the best. Our own opinion on the matter is strongly in favor of good twiggy boughs cut in the late winter or early spring, that they may be on the green side and so tough enough to last the season. If boughs are used, they ought to be inserted at least one foot in the soil with the tops inclining, if anything, a little outwards: i. e., the tops of the boughs should not meet, as it is at this part that so much space is wanted when the Peas are in full growth, therefore by inclining your sticks outwards it leaves room for all top growth and tends to keep your vines in an upright position. Should your sticks not be twiggy at the bottom, it will be found desirable to insert a few short boughs between the taller sticks wherever necessary.

Now although we might all wish to stake our Sweet

Peas with boughs, in the majority of cases this is an impossibility through our inability to procure them: therefore, the question of the next best substitute arises, and this is to be found in wire netting of fouror six-inch mesh. The initial cost of this material is certainly a drawback where a large area of Sweet Peas is grown, but it will be found the cheapest in the long run, lasting as it does for many years. Netting four to six feet wide will be found sufficient for this locality, but in cooler sections where the Sweet Pea vines flourish as they do in our extreme Northern States, Canada, and England, this width may have to be doubled. Stakes to support the wire netting will have to be used, driving these twelve or eighteen inches into the ground. Some growers only use one row of wire netting, but we believe in the double row, say twelve inches apart. Another method is the use of soft, light jute twine. In this case stout stakes are used, driving one into the ground every five feet down the rows on either side of the Peas, then running the twine from stake to stake commencing a few inches from the ground with six inches between each length. This will be found a most economical method of staking your Peas, though not so satisfactory as boughs or wire netting.

The Rev. W. T. Hutchins' advice on staking as given in one of our former publications is also of interest on this important point in Sweet Pea culture, and we append the following extracts:

"There are all degrees of success in growing Sweet Peas, and the answer to the question of what kind of support to give them depends largely on how thrifty your vines are. I expect my own vines to make a

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strong growth, at least six feet high, and, besides the matter of height, it is quite evident that such a weight of vines when wet, and when the strain of a gust of wind comes broadside on them, will require a very strong support. If you care for only moderate success, smaller bushes or four-foot poultry wire may be sufficient. If your soil has neither depth nor riches and you provide a six-foot hedge of birch, your bushes will be more conspicuous than your Sweet Peas. Or, if you neglect your vines, and let them go to seed, they will dry up when two-thirds grown. Or, if you plant them too thickly, they will make a spindling and shorter growth. You are the one to decide whether you want a four-foot or a six-foot support.

"Then, if you ask what to make the support of, judging from most people, you will use that which comes most convenient.

"Here are the points to be considered in a support for Sweet Peas. Grow them at their best, and provide for both height and strength, then allow for their loose branching habit, and give them width enough to ramble. I use birches entirely. They are brought to me in twelve or fourteen foot lengths, just as cut from the patch, and from each of these I get one good stout one seven feet high, and the lighter top is used to fill They are less unsightly if the tops are clipped to an even six-foot level and the sides are trimmed sufficiently to present a neat view from the end. These twiggy birches are a more natural support and in the scorching sun do not heat as wire will. Of course, birches last but one year, and should be procured early in the spring, before their leaves start. Make ashes of them in the fall.

"There is no limit to the style of trellis that can be made, and they should be so made as to take apart easily for storing away in the winter. By painting the ground end of the posts or uprights with asphaltum they will last longer. The printed designs are mere suggestions of what can be made cheaply, see page 72.

"Keep your vines green and growing as long as you can. Good rich ground and keeping the pods off will do this, and when the vines get above six feet clip off the tops and they will send up new branches."

## CULTIVATING, MANURING, AND WATERING

The liberal use of the hoe between the rows and plants will be found of great service in conserving moisture and, of course, at the same time keeping down the weeds. Should the weather set in very dry and hot, a liberal mulching of manure or grass should be given, extending quite twelve inches on either side of the plants, and a thorough watering two or three times a week will keep your seedlings on the move. No liquid manure should be applied, however, until the first blossoms appear, and then only sparingly—or rather in a weak state—at first, alternating the waterings with clear water. As the plants come into full flower the manure may be made much stronger.

Now, as to the kind of manure to apply. We know that growers of experience have their own pet manures and mixtures, but the following may all be relied upon. One of the least expensive, and one which at the same time almost serves a double purpose by both feeding the plant and acting as an insecticide, is soot. Place about a peck of soot in a bag and let it dissolve

for a few hours in an old tub or barrel filled with water. Guano may be used in the proportion of one pound to twenty gallons of water; or sulphate of potash, one ounce to one gallon of water. Farmyard liquid manure, used about the color of weak tea, is also of service. and nitrate of soda might be used occasionally at the rate of, say, <sup>1</sup>/<sub>4</sub> ounce to a gallon of water. When using manure water, it is well to let it follow a thorough soaking with clear water, that the fertilizing material may penetrate to the lowest roots, and if possible all watering should be done after the sun has gone down, as this will to a great extent save the cracking of the soil and allow the plants to get the full benefit of the moisture. Spraying the vines overhead in the cool of the evening will be found to benefit the plants during a hot, dry spell.

#### **BUDS DROPPING**

Where the plants have been well cultivated and heavily manured and the vines consequently are growing vigorously, it sometimes happens that a large proportion of the first buds drop from the flower stem before opening. The grower need not be alarmed at this, as the vines will soon assume their natural mode of procedure, all buds subsequently opening and remaining on the stem as they should do. Bud dropping is most frequently met with in a wet season.

# WINTER BLOOMING SWEET PEAS

Sweet Peas are now being grown in yearly increasing quantities under glass to produce the ever welcome, fragrant flowers during the dull days of winter and spring.

To succeed in this, a heated greenhouse is naturally indispensable, and the seeds may be sown on benches, in the border, or in pots. The date of sowing will depend on when the Sweet Peas are wanted in bloom. (The early varieties take from two to three months from sowing.) If in pots, it is well to plant six seeds in a three- or four-inch pot in a mixture of leaf soil, loam, and sand, placing the pots as near the glass as possible, and in the early stages of growth they must be kept quite cool: in fact, at this period they are better started in a cold frame (if sown in the fall) and brought into heat after they are repotted. (If sown in beds the heat may, of course, be regulated by the valves.) This operation should be attended to when the plants are about four inches high, using six-inch pots and adding a little manure to the potting soil. The plants will need also a few twigs inserted round them to keep the vines upright and so materially assist their growth. When the roots are freely working round the sides of the pots, they should then get their final shift into ten-inch pots, or even larger, and the bottom portion of the soil for this last potting should consist of two parts old rotted manure, standing the pots on a thick turf, placed grass side downwards, that the roots when they work through the pot may get nourishment and assistance therefrom. As the plants will now be growing freely, they can stand more heat (an average temperature of from 60° to 70° Fahr. by day should not be exceeded, at the same time giving as much ventilation as possible), but to encourage a sturdy vine keep as near the light as possible. During bright weather they should be sprayed night and morning with water the same temperature as the house, occasionally using a weak solution of whale-oil soap to keep the vines free from insects.

When the plants begin blooming, frequent applications of liquid manure, or occasional top dressings of soil mixed with good commercial fertilizer, will materially assist the vines and prolong the flowering period.

Burpee's early varieties, sown the first week in

Burpee's early varieties, sown the first week in October in the greenhouses at Fordhook, began blooming towards the end of November, while the later varieties, sown on the same date, came into bloom about four weeks later. The varieties are Burpee's Re-Selected Earliest of All, Burpee's Earliest White, and Burpee's Earliest Sunbeams. Good varieties to follow these are Mont Blanc, Shasta, Countess Spencer, Florence Morse Spencer, John Ingman, White and Primrose Spencers, Janet Scott, Lady Grisel Hamilton, Flora Norton, Helen Pierce, etc.

Mr. Anton Zvolanek, of Bound Brook, New Jersey, is to be congratulated on his improvements in early flowering Sweet Peas, and the varieties introduced by him include many different colors. Among the best of them might be mentioned: Mrs. E. Wild, a beautiful rosy self-colored variety; Mrs. A. Wallace, rosy lavender; Mrs. Wm. Sim, salmon pink; and Mrs. F. J. Dolansky, a lovely pale pink. We shall continue watching Mr. Zvolanek's work with great interest.

#### SEED AND SLOW GERMINATION-

The majority of the blue and lavender colored Sweet Peas produce small, poor looking seeds of a mottled appearance, which by the novice may be regarded as of inferior quality, yet it is simply the nature of these varieties to produce such seed, and they are of as good germinative power as the large, round, plump seed which we find in the other colors.

Some seasons Sweet Peas are slow in germinating or fail to do so altogether. Now, before condemning the seedsman, it is well to find out where the fault lies, and if the grower will take the trouble to carefully examine the seed, nine times out of ten he will find that although they are still perfectly dormant they are quite plump and fresh, and if the outer coating is cut with a sharp knife, taking care not to harm the embryo plant, he will find that in a few days they will germinate freely and well. The reason assigned for this state of affairs is that the seeds have been so well ripened—say after a very hot, dry summer—that the coating has become so hard as to be quite impervious to moisture.

In the case of new and expensive varieties, many growers have now adopted the method of cutting all the seed ere planting.

White seeded varieties are also a cause of much annoyance at times, as they are apt to rot in the ground should the weather be wet and cold after planting. We should, therefore, advise sowing these rather thicker than the dark seeded sorts, and not so deeply; or, to hurry germination, and so avoid the risk of them rotting in the soil, the seed should be soaked in tepid water for twelve hours previous to planting.

## INSECT PESTS AND BLIGHT

THE CUT WORM.—This pest is in some seasons most destructive to the vines in early stages of growth, and various methods of combating its ravages have from time to time been advocated, such as hand-picking,

sowing lettuce beside the rows of Peas, etc. However, a dusting of tobacco powder or soot will be found as effectual a deterrent to the mischief caused by these worms as anything you can try.

RED SPIDER AND GREEN APHIS OR "PEA LOUSE".—
These small insects are apt to attack the vines during hot and dry periods, and war must be waged against them as soon as they appear or they will multiply so quickly as to soon destroy all growth. We recommend spraying with whale-oil soap or a weak solution of kerosene emulsion. Vines that are kept growing steadily and that receive a spraying of clear water occasionally in the evening are less liable to be attacked by these pests.

The SWEET PEA BLIGHT, as the writer has seen it, appears to be caused by drought combined with shallow cultivation, for had the roots been able to penetrate the hard subsoil and reached rich soil, the plants would naturally have kept healthy and strong, instead of drying up, flagging, and becoming yellow, in many cases ere they had even bloomed.

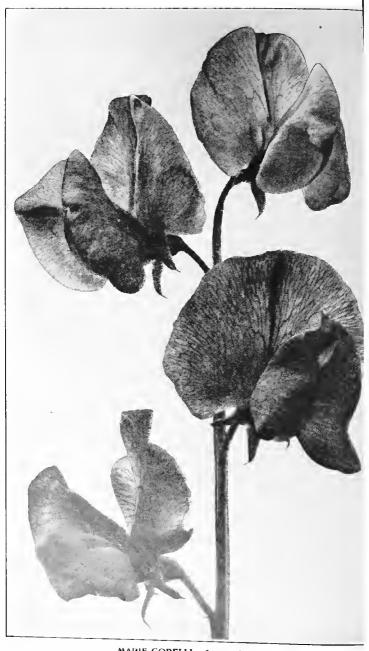
# THE "SPENCER" TYPE OF SWEET PEAS

The introduction of Countess Spencer in 1904 will be marked as creating a new era in the Sweet Pea world. This, the most lovely of all blush pink Sweet Peas, is at once the largest and the forerunner of quite a new type. Previous to the Countess Spencer appearing, our Sweet Peas were either of hooded standard or expanded upright standard forms. Countess Spencer was the first to appear with beautifully frilled and wavy standard and wings, of immense size—but, alas, it was not fixed to type, as it sported very badly. This

sportive character, however, has proved really a blessing in disguise, as so many of the sports were of quite new shades, at the same time containing all the parents' characteristic form and size. All would have been right had the various seed-growers not been in such a hurry to rush those unfixed sports upon the market, much to the disgust of many amateur growers.

A peculiarity about the "Spencer" sports is that they generally come in duplicate: *i. e.*, the same color in Spencer and grandiflora types. Take, for instance, Helen Lewis and John Ingman: with Helen Lewis sport there was also a very large grandiflora sport of the same color, similar in appearance to Lady Mary Currie, and with John Ingman appeared a variety of much the same color, but also of grandiflora type. The result was that both were saved, and as the old type is so much more prolific in seed-bearing, the result became worse instead of even remaining stationary. However, observant growers are now becoming more careful in the saving and roguing of their stocks, so that in the future we may hope for better results from new colors of the Spencer type.

Much has been written on the sportiveness of Countess Spencer and its seedlings, some growers affirming that it is caused by small insects, others that the bee is supposed to split the calyx or keel and so carry the pollen to other varieties; others again explain how the pistils in some flowers are enlarged and come out through the keel, and so are in a position to catch the pollen from other varieties; but it is a question how any of these theories can be established, as it is a recognized fact that emasculation has been effected ere the flower opens.



MARIE CORELLI,—from a Photograph. 26

## LIST OF "SPENCER" SWEET PEAS

- including those introduced up to 1909 and advance trials of varieties to be introduced in 1910.
- Varieties marked with an asterisk are not yet in general cultivation.
- AMERICA Spencer. (Ready in 1911.) Red flaked on white ground.
- AUDREY CRIER.\* (Breadmore, 1908.) A lovely shade of salmon pink, of the largest size and finest form.
- Anna Lumley.\* (Lumley, 1909.) Synonymous with Othello Spencer.
- APPLE BLOSSOM SPENCER. (Burpee, 1908.) Rose and blush. The form is beautiful and it is of largest size.
- ASTA OHN. (Morse, 1909.) Charming soft lavender, suffused mauve.
- AURORA Spencer. (Burpee-Morse, 1909.) Cream white ground; exquisitely flaked and mottled rich orange salmon.
- BEAUTY.\* (Bolton-Sharpe, 1908.) A blush pink Spencer.
- BEATRICE Spencer. (Morse, 1909.) White ground tinted with soft pink and buff on the standard, while each wing has a blotch of brighter pink near the base.
- BLUSH Spencer.\* (King, 1909.) White suffused blush pink.
- BOBBIE K.\* (Chandler-Unwin, 1908.) A pale pink Spencer.
- Breadmore's Lavender.\* (Breadmore, 1909.) (Lavender George Herbert.) A lavender Spencer.
- Captain of the Blues Spencer. (Morse, 1909.) Purplish-maroon. Wings purple showing veins of rosy-purple, variable. Similar in color to Waverly.
- CECIL CRIER.\* (Breadmore, 1907.) A deep rosy-pink. CHILTON.\* (Clark, 1909.) Pale salmon-pink Spencer.

CLARA CURTIS. (Bolton, 1908.) Primrose colored Spencer. Synonymous with Primrose Spencer.

CLARK'S DUCHESS.\* (Clark, 1909.) Deep salmon. CLARK'S QUEEN.\* (Clark, 1909.) Cream shaded to-

wards edges of petals with deep pink.

CODSALL ROSE.\* (Baker, 1906.) A deep rose. COLLEEN.\* (W. Deal, 1910.) Carmine standard,

COLLEEN.\* (W. Deal, 1910.) Carmine standard, wings blush.

Constance Oliver.\* (Lumley, 1908.) Delicate pink, suffused with cream. Similar to Nell Gwynne.

Countess of Northbrook.\* (Breadmore, 1909.) Large pale pink.

Countess Spencer.\* (Sydenham-Cole, 1904.) A lovely pale pink. The original "Spencer."

CRIMSON PARADISE.\* (Hemus, 1908.) Crimson. Similar to King Edward Spencer.

Dainty Spencer.\* (Bath, 1909.) See Elsie Herbert, with which it is synonymous.

DODWELL F. Brown.\* (Eckford, 1909.) Crimson.

Doris Clayton.\* (Breadmore, 1909.) Lavender.

E. C. MATTHEWS.\* (Jones, 1907.) Velvety maroon. E. J. DEAL.\* (Johnson, 1910.) White, edged rosy carmine. Similar to Elsie Herbert.

EARL OF PLYMOUTH.\* (Baker, 1909.) Buff colored.

EARL SPENCER.\* (Cole, Dobbie, 1910.) A waved Henry Eckford.

EDROM BEAUTY.\* (Dobbie, 1910.) Salmon orange.

Elsie Herbert.\* (Breadmore, 1908.) White, edged pale rose.

ENCHANTRESS. (Stark, 1906.) Has proved to be synonymous with Countess Spencer.

ERIC HINTON.\* (Hinton Bros., 1904.) Bright pink, deeper towards the edges.

- Ernest King.\* (King, 1909.) Large orange-pink.
- ETTA DYKE. (Breadmore, 1908.) Synonymous with Burpee's White Spencer.
- EVELYN HEMUS.\* (Hemus, 1908.) Cream, with a picotee edging of terra-cotta pink.
- FLORA NORTON SPENCER. (Morse, 1909.) Beautiful pale blue,—a charming color. Not of largest size.
- FLORENCE MORSE SPENCER. (Morse, 1908.) Beautiful light pink, deepening towards the edges. Similar to Princess Victoria.
- GEORGE HERBERT. (Breadmore, 1907.) Bright rosycarmine of largest size and best Spencer form. Synonymous with John Ingman.
- GEORGE BAXTER.\* (Bolton, 1909.) Maroon, shaded violet.
- GEORGE STARK.\* (Stark, 1910.) An intense dazzling scarlet.
- GIPSY QUEEN.\* (Watkins & Simpson, 1909.) Similar to but not so good as Ramona Spencer.
- GLORY OF PARIS.\* (Clark, 1909.) Similar to Burpee's King Edward Spencer.
- GORDON ANKENTELL.\* (Breadmore, 1909.) Flame colored.
- HELEN LEWIS. (Breadmore-Watson, 1906.) Large, wavy, orange colored standard; wings, rosy-salmon.
- HORACE SKIPPER.\* (Stark, 1908.) Deep rosy-pink. J. T. Taylor.\* (Breadmore, 1909.) Plum colored.
- JOHN INGMAN. (Sydenham-Cole, 1905.) Rosy-carmine with darker shadings, large and of best form.
- JOSEPHINE BARNARD.\* (Bath, 1909.) Rosy-pink; standard lighter than wings.
- KATHLEEN MACGOWAN.\* (Breadmore, 1909.) Sky blue. Similar to Flora Norton Spencer.

King Alfonso.\* (Breadmore, 1909.) Crimson, shaded magenta. Similar to King Edward Spencer.

KING EDWARD SPENCER. (Burpee, 1909.) Almost a crimson scarlet self. A magnificent flower.

KITTY CLIVE.\* (Bolton, 1909.) Pale scarlet salmon. KITTY CRIER.\* (Breadmore, 1909.) Rose and pink. LADY ALTHORP.\* (Cole, 1906.) White, beautifully tinted buff. Similar to Mrs. Sankey Spencer.

LADY FARREN.\* (Stark, 1909.) Rose. Somewhat similar to Marie Corelli.

LORNA DOONE.\* (Stark, 1908.) Pale blush.

LOVELY Spencer. (Morse, 1909.) Bright pink at the base of both standard and wings, showing a softer pink and becoming almost blush white at the edges.

Lucy Hemus.\* (Hemus, 1908.) Light pink on cream. Maggie Stark.\* (Stark, 1909.) Orange-scarlet.

MALCOLM'S WAVED CREAM.\* (Malcolm-King, 1909.)
Same as Primrose Spencer.

MARIE CORELLI.\* (Burpee-Morse, 1910.) Brilliant rose-carmine or red. Very attractive and belongs in all "first dozen" sets.

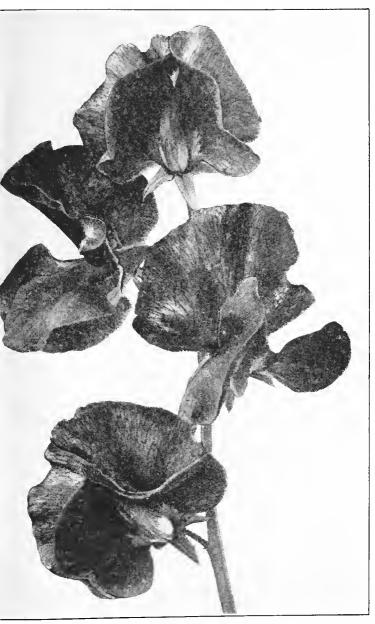
MARJORIE LINZEE.\* (Breadmore, 1909.) Rosy pink. MARJORIE WILLIS.\* (Lumley, 1908.) A large, rose colored Spencer, resembling Marie Corelli.

MAROON PARADISE.\* (Hemus, 1908.) Deep maroon. MASTERPIECE.\* (Dobbie, 1910.) Lavender self, flushed rose on standard.

MAUD GUEST.\* (Eckford, 1909.) Synonymous with Lady Althorp.

MENIE CHRISTIE. (Dobbie, 1908.) Standard purplish-carmine; wings, rosy magenta.

MIRIAM BEAVER. (Burpee-Morse, 1910.) Salmon-pink suffused with buff or apricot on a primrose ground.



BURPEE'S KING EDWARD SPENCER,-from a Photograph.

- Miss A. Brown.\* (Darlington, 1909.) Synonymous with Asta Ohn.
- Miss M. A. Linzee.\* (Breadmore, 1908.) A bright rosy-pink self.
- MRS. ANDREW IRELAND. (Dobbie, 1909.) Similar to Apple Blossom Spencer but on a buff ground.
- MRS. CHARLES FOSTER.\* (Baker, 1907.) A rosy-lavender Spencer.
- Mrs. Charles Mander.\* (Baker, 1907.) Rich magenta with rather darker wings.
- MRS. C. W. BREADMORE.\* (Breadmore, 1908.) Buff ground with picotee edge of rose.
- MRS. HENRY BELL.\* (Bolton, 1908.) Rich apricot pink on cream ground. Similar to Mrs. Routzahn.
- MRS. HARDCASTLE SYKES.\* (Bolton, 1906.) A pale pink Spencer. Similar to Princess Victoria and Florence Morse Spencer.
- MRS. HUGH DICKSON.\* (Dobbie, 1910.) A beautiful rich apricot on cream ground, shaded pink.
- Mrs. Joseph Chamberlain Spencer.\* (Bath, 1909.) White striped with rose.
- MRS. ROUTZAHN. (Burpee, 1909.) Buff or apricot ground, flushed and suffused with delicate pink. MRS. R. W. PITT.\* (Stark, 1909.) Rosy cerise.
- MRS. SANKEY SPENCER. (Morse, 1909.) A black seeded White Spencer, showing a tinge of buff in the bud stage. Not of largest size.
- MRS. T. G. BAKER.\* (Baker, 1909.) White, edged and tinted amber buff. Similar to Lady Althorp.
- MRS. WALTER CARTER.\* (Bunting, 1909.) A Javender colored Spencer.
- MRS. WM. KING.\* (King, 1908.) Synonymous with John Ingman.

NANCY PERKINS.\* (Perkins-Unwin, 1910.) A Spencer Henry Eckford.

NAVY BLUE SPENCER.\* (Breadmore, 1909.) Blue. NELL GWYNNE.\* (Stark, 1908.) Deep cream, suffused with salmon. Similar to Constance Oliver.

NORMA.\* (Clark, 1909.) Blush, suffused pale salmon; pink at edges of petals.

OLIVE BOLTON.\* (Bolton, 1907.) Deep rosy pink.

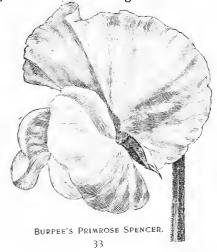
OLIVE RUFFELL.\* (Stark, 1908.) Bright rosy salmon. OTHELLO SPENCER. (Burpee-Morse, 1909.) A rich, deep maroon of largest size.

Paradise. (Sydenham, 1907.) Same as Countess Spencer.

PARADISE CARMINE.\* (Hemus, 1907.) Synonymous with John Ingman.

PARADISE IVORY.\* (Hemus, 1907.) Synonymous with Queen Victoria Spencer.

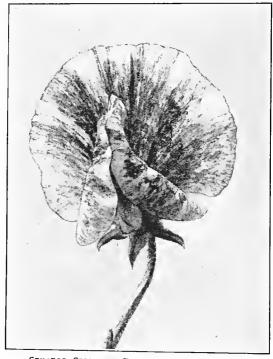
PARADISE RED FLAKE.\* (Hemus, 1908.) A waved America, red flaked on white ground.



President.\* (House, 1909.) Similar to Senator Spencer, but not so much color nor such a desirable variety.

PRIMROSE SPENCER. (Burpee, 1908.) Deep primrose or creamy yellow of largest size. Clara Curtis, Althorpe Cream, Malcolm's Cream, and Primrose Paradise are all synonymous.

Prince of Asturias.\* (Breadmore, 1908.) Standards deep chocolate; wings deep purple. Similar to Othello Spencer.



SENATOR SPENCER. Engraved from a Photograph.

- Princess Alice.\* (Bath, 1909.) Same shade as the grandiflora Emily Eckford.
- Princess Katherine.\* (Bath, 1909.) Pale blush pink.
- Princess Victoria. (Dobbie, 1908.) A light pink Spencer of largest size, similar to Florence Morse Spencer.
- Purity.\* (Bolton, 1908.) Synonymous with White Spencer.
- QUEEN VICTORIA SPENCER. (Burpee, 1909.) A black seeded Primrose Spencer, flushed rose in the bud stage.
- RAMONA SPENCER. (Morse, 1909.) White, flaked light pink or blush.
- Romani Rauni.\* (Sydenham-Aldersey, 1909.) A buff ground Countess Spencer.
- Rosabelle Hoare.\* (Unwin, 1909.) Rose flake on white ground.
- Rosalind.\* (Clark, 1909.) A deep rose colored Spencer.
- Rosie Adams.\* (Stevenson-Wright, 1908.) Rosy mauve.
- Rosie Sydenham.\* (Sydenham, 1906.) Synonymous with John Ingman.
- Rosie Gilbert.\* (Gilbert, 1908.) A crimson self.
- SENATOR SPENCER. (Burpee-Morse, 1910.) Deep claret or wine-color stripes and flakes on a light heliotrope ground.
- SILVER WINGS.\* (Stark, 1908.) Similar but not so good as Ramona Spencer.
- SUNPROOF CRIMSON.\* (Sydenham-Holmes, 1910.) Similar to King Edward Spencer.



A Spray of Burpee's White Spencer. Exactly Natural Size. 36

- Sunrise.\* (Gilbert, 1909.) An orange self, but not so good as Helen Lewis.
- Syeira Lee.\* (Sydenham-Aldersey, 1909.) A rich salmon pink on a buff ground.
- SUTTON'S QUEEN. (Sutton-Rothera, 1908.) Buff ground, flushed and edged pink.
- Tennant Spencer. (Morse, 1909.) Purplish mauve of largest size and best Spencer form.
- THE KING. (Dobbie, 1909.) A grand variety;—quite similar to Burpee's King Edward Spencer.
- THE MARQUIS. (Dobbie, 1908.) Rosy heliotrope, variable.
- TRIUMPH SPENCER.\* (Bolton, 1909.) Salmon-pink bi-color.
- VERA JEFFERY.\* (Breadmore, 1908.) A pale pink.
- W. T. HUTCHINS. (Burpee-Morse, 1910.) Light apricot or buff overlaid with a beautiful blush pink.
- WHITE SPENCER. (Burpee, 1908.) Pure white, of largest size. The finest white in cultivation. Although originating in America, it is identical with the English Etta Dyke.
- WHITE PARADISE. (Hemus, 1908.) Synonymous with Burpee's White Spencer.
- Winnie Jones.\* (Stark, 1909.) A Spencer Jessie Cuthbertson.
- YANKEE.\* (House, 1909.) An America Spencer.
- ZEPHYR.\* (Hemus, 1908.) A silvery blue self. Similar to Flora Norton Spencer, but rather larger.

Note. We have endeavored to include in the list of "Spencer" Varieties all known varieties, and while a number are not yet cataloged generally, we trust our efforts will be appreciated by those who are desirous of becoming acquainted thoroughly with this magnificent new type of Sweet Peas.

W. A. B. & Co.

#### UNWIN TYPE OF SWEET PEAS

These resemble the Spencer type, having the same wavy form, but are not so large, the original variety being Gladys Unwin. The vines are thrifty and produce abundantly the handsome waved flowers which make most attractive bouquets. Nora Unwin is especially fine in form and Frank Dolby is to be classed among the best lavender or light blue.

A. J. Cook. (Unwin, 1907.) Violet mauve self. Variable.

Anglian Blue.\* (King, 1909.) A waved Flora Norton.

Blush Queen.\* (Dobbie, 1907.) Pale blush.

CHRISSIE UNWIN. (Unwin, 1908.) Rosy-red self.

E. J. Castle. (Unwin, 1907.) Light rosy carmine, with light salmon shading.

Frank Dolby. (Unwin, 1907.) Lavender blue.

GLADYS UNWIN. (Unwin, 1905.) Pale pink, beautifully waved.

Jack Unwin.\* (Unwin, 1909.) Rose flake on white ground.

Miss E. F. Drayson.\* (Unwin, 1908.) Crimson-scarlet self.

Miss Frills.\* (Gilbert, 1909.) White shaded blush.

MRS. ALFRED WATKINS. (Unwin, 1907.) Pink shading to blush.

Nora Unwin. (Unwin, 1907.) Pure white, beautifully waved.

PHOENIX.\* (King, 1909.) White, flushed and shaded lilac.

PHYLLIS UNWIN. (Unwin, 1906.) Rosy carmine self. PINK PEARL.\*\* (Unwin, 1907.) Rich pink self.

#### GENERAL LIST OF SWEET PEAS

Abbreviations: H., Hooded Standard; S. H., Slightly Hooded Standard; E., Erect Standard.

An asterisk (\*) denotes that the variety is nearly extinct.

Two asterisks (\*\*) mean that the variety is little known, but listed in a few catalogs.

Those printed in heavy type are what we consider the best varieties.

ACME.\*\* (H. J. Jones, 1908.) Blush white. S. H.

Admiration. (Burpee, 1900.) Beautiful pink lavender. H.

ADONIS.\* (Carter, 1884.) Standard carmine pink with rosy wings. E.

ADMIRAL TOGO.\*\*
(Breadmore, 1906.) Extremely dark violet maroon. H.

Agnes Eckford. (Eckford, 1907.) A soft blush pink, self color. H.

Agnes Johnston. (Eckford, 1903.)



ECKFORD'S "BLANCHE BURPEE."

A typical bloom of the erect or expanded type.

Standards are rose pink, shaded cream; pinkish buff wings. E.

ALBATROSS.\*\* (Dobbie, 1907.) A pure white black-seeded variety. S. H.

ALBA MAGNIFICA.\* (Henderson, 1890.) A pure white self. E.

Albion.\*\* (Stark, 1906.) Ivory white.

ALICE ECKFORD.\* (Eckford, 1896.) Creamy white, with tinge of purplish violet. E.

America. (Vaughan, 1896.) White striped red. E. American Belle.\* (Burpee, 1894.) Standard bright rose; wings white with carmine spots. Now discarded. F.

AMERICAN QUEEN.\* (Burpee, 1902.) Standard clear salmon red; wings bright deep rose. E.

Annie B. Gilroy.\*\* (Eckford, 1909.) Deep cerise.

APPLE BLOSSOM. (Eckford, 1887.) Shaded and edged soft rose on white. H.

Aurora. (Burpee, 1897.) White ground, striped orange salmon. S. H.

Autocrat.\*\* Better known under the name of Indigo King.

Annie Stark.\*\* (Stark, 1906.) White delicately flushed with pale pink.

BADEN POWELL.\*\* (Jones & Son, 1901.) Similar to Captain of the Blues. S. H.

BEACON. (Bolton, 1906.) Standard cerise with creamy wings. E.

BLACK.\* (Noble, Cooper & Bolton, 1880.) Generally known as Invincible Black. E.

Blackbird.\*\* (Bolton-Sharpe, 1908.) Blackish maroon. Synonymous with Midnight. S. H.

Baker's Scarlet.\*\* (Baker, 1909.) Scarlet self. E. Black Knight. (Eckford, 1898.) Standard dark claret, wings brownish purple. E.

BLACK MICHAEL. (Eckford, 1905.) Bright shining reddish maroon. F.

Blanche Burpee. (Eckford, 1897.) Snowy white. E.

- BLANCHE FERRY. (Ferry, 1889.) Standard bright rose-pink; wings creamy white. E.
- Blue Edged.\* (Trevor Clarke-Carter, 1883.) White and pink edged with blue. E.
- BLUE HYBRID.\* Probably identical with Blue Edged. E.
- Blushing Beauty.\* (Eckford, 1893.) Soft rosepink. H.
- **Bolton's Pink.** (Bolton, 1905.) Rich orange-pink. E. Boreatton.\* (Eckford, 1887.) Dark maroon self. E.
- BRIDE OF NIAGARA.\* (Vick, 1895.) Bright carmine rose standard; wings white, tinged pink; double flowers. E.
- Bridesmaid. (Vaughan, 1904.) Carmine shading to rose and pink; wings of a lighter shade. E.
- Brilliant Blue. (Burpee, 1907.) The standard is very large, slightly hooded, of the richest dark navy blue; the shaded purple wings are deep Oxford blue. E.
- Brilliant.\* (Burpee, 1897.) Crimson scarlet. S. H. Britannia.\*\* (Dobbie, 1904.) White, flaked crimson. S. H.
- Bronze King.\* (Haage & Schmidt, 1894.) Coppery standard, ivory white wings. E.
- Bronze Prince.\* (Eckford-Bull, 1885.) Standard rose flushed bronze scarlet with pale blush wings. E.
- Butterfly.\* (Sutton, 1878.) White, edged and shaded with blue. H.
- California.\* (Lynch, 1897.) Very pale pink, self colored. H.
- CALYPSO.\* (Eckford, 1900.) Magenta, flushed and veined mauve. E.
- CAPRICE.\*\* (Johnson, 1906.) White, delicately shaded pale pink. S. H.

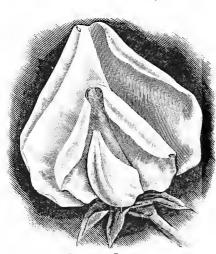
- CAPTAIN CLARKE.\* (Clarke-Sharpe, date of introduction unknown.) White, flushed and penciled with carmine; wings blue edged. E.
- Captain of the Blues. (Eckford, 1890.) Standard bright purple blue; wings paler blue. E.
- Captivation. (Eckford, 1897.) Of a deep magenta shade. S. H.
- CARDINAL.\* (Eckford, 1885.) Scarlet crimson. E.
- CARMEN SYLVA.\* (Laxton, 1892.) Claret shading to white; wings light lilac. E.
- CARMINE Rose.\*\* (Muskett.) Date of introduction not known. Better known as Princess Beatrice. E.
- CELESTIAL.\* (Lorenz, 1896.) Standard light mauve; wings lavender. H.
- CHANCELLOR.\* (Eckford, 1898.) Standard bright orange; wings bright orange pink. H.
- Coccinea. (Eckford, 1901.) Self colored, bright rich cherry. E.
- COLONIST.\* (Eckford, 1898.) Soft lilac, overlaid bright rose. S. H.
- COLUMBIA.\* (Burpee, 1897.) White ground, suffused purple and penciled pink. E.
- COQUETTE. (Eckford, 1896.) Deep primrose, shaded with lavender. S. H.
- CORAL GEM.\*\* (Vaughan, 1907.) Light coral self. H. CORONATION.\*\* (Introducer and year of introduction unknown.) Blush with pink at the back of the petal.
- CORONET.\* (Walker-Hutchins, 1898.) White striped with orange pink. E.
- Countess Cadogan. (Eckford, 1899.) Bluish purple standard and clear blue wings. E.
- Countess of Aberdeen.\* (Eckford, 1896.) Self colored soft pink. H.

- Countess of Lathom. (Eckford, 1900.) A soft cream tint, heavily shaded with flesh pink in the center of the standard. H.
- Countess of Powis.\* (Eckford, 1897.) Glowing orange, suffused with purple. E.
- Countess of Radnor. (Eckford, 1891.) Light lavender with faint purplish tinge. H.
- Countess of Shrewsbury.\* (Eckford, 1896.) Rose standard with white wings. E.
- CREOLE.\* (Burpee, 1896.) The standard is a light-pinkish lavender with wings of pure lavender. E.
- CROWN JEWEL. (Eckford, 1896.) Primrose ground, veined with violet. H.
- Crown Princess of Prussia.\* (Haage & Schmidt, 1869.) Deep pink shading to very light pink. E.
- CREAM OF BROCKHAMPTON.\*\* (Foster, year of introduction unknown.) A clear cream self.
- CYRIL Breadmore.\*\* (Breadmore, 1906.) Rosy carmine. S. H.
- Dainty. (Burpee, 1903.) The flowers on first opening appear to be white, but quickly change to white with pink edge, making a most charming contrast; there is more pink on the edges of the standard than on the edges of the wings. S. H.
- **David R. Williamson.** (Eckford, 1905.) The large standard is of a rich indigo blue while the wings are slightly lighter in shade. S. H.
- DAWN.\*\* (Stark.) Standard light crimson magenta; wings white shaded crimson. S. H.
- DAYBREAK.\* (Burpee, 1896.) White marbled rose and crimson. E.
- Delicata.\* (Stark, 1906.) White tinted with pink. S. H.

Delight.\* (Eckford, 1889.) White crested with crimson. E.

Devonshire Cream.\*\* (Bathurst-Mackereth, 1908.) Cream self. E.

DOLLY VARDEN.\* (Burpee, 1898.) Standard bright purple-magenta shading lighter, almost white on the sides and penciled with heavy maroon at the base. H.



DOROTHY ECKFORD.

Representing the slightly-hooded type.

Domino.\*\*
(Henderson, 1905.) Known by its more popular name, "Speckled Beauty."

DORA BREAD-MORE.\*\* (Breadmore, 1906.) A primrose self, shaded but S. H.

Dorothy Eckford. (Eckford, 1903.) Large, pure white flower. S. H.

Dorothy Tennant. (Eckford, 1892.) Large rosy mauve. H.

DOROTHY VICK.\*\* (Vick, 1897.) Standard scarlet, wings crimson, produces double flowers. E.

Douglas Breadmore.\*\* (Breadmore, 1906.) A bright purple flake. S. H.

Duchess of Edinburgh.\* (Eckford, 1887.) Crimson. E.

- Duchess of Sutherland.\* (Eckford, 1898.) Pearly white, suffused light pink. H.
- Duchess of Westminster. (Eckford, 1900.) Apricot flushed pink; wings rose pink. S. H.
- Duchess of York.\* (Eckford, 1895.) White striped with pinkish purple. E.
- Dudley Lees.\*\* (Breadmore, 1908.) A deep maroon. S. H.
- Duke of Clarence.\* (Eckford, 1893.) Rosy claret. H.
- Duke of Sutherland. (Eckford, 1898.) Standard deep claret; wings deep violet blue. H.
- **Duke of Westminster.** (Eckford, 1899.) A beautiful shade of rosy claret. H.
- DUKE OF YORK.\* (Eckford, 1895.) Standard rosy pink; wings white. E.
- EARL CROMER. (Eckford, 1907.) Standard deep reddish mauve; wings large and widely, spreading; of the same deep rich mauve, but slightly tinged with lavender. H.
- Earliest of All. (Burpee, 1898.) Flowers fully ten days earlier than Extra Early Blanche Ferry, bearing a profusion of beautifully tinted flowers. Standard bright, rosy pink; wings creamy white, suffused pale rose. Planted under glass in September the vines begin to bloom in November. E.
- Earliest of All Re-Selected Extreme Early. (Burpee, 1902.) This strain is as much earlier than Earliest of All as that variety is ahead of Extra Early Blanche Ferry. The plants come into full flower when only twelve inches high. Christmas Pink is similar. E.

Earliest White. (Burpee, 1906.) This was discovered in a field of the Re-Selected Burpee's Earliest of All. There was only one plant and this produced pure white flowers. A crop planted July 12th came in bloom August 20th, while the plants of *Mont Blanc* planted on the same day showed no sign of bloom. The plant is unusually sturdy and of dwarf and even growth. The best white for greenhouse. E.

EASTERN QUEEN.\* (Introducer and year of introduction unknown.) Cream ground, slightly flaked.

ELIZA ECKFORD.\* (Eckford, 1895.) Flesh pink, suffused rose and white. H.

Emily Eckford. (Eckford, 1893.) Rosy mauve changing to light blue. S. H.

EMILY HENDERSON. (Henderson, 1894.) White. E. EMILY LYNCH.\* (Lynch, 1897.) Standard scarlet rose; wings primrose tinged pink. H.

EMPRESS OF INDIA.\* (Eckford, 1891.) Standard rose, with white wings. E.

ETNA.\* (Laxton, 1892.) A dark brownish crimson and violet. E.

EVELYN Breadmore.\*\* (Breadmore, 1906.) Blush white slightly tinged pink. S. H.

EVELYN BYATT. (Watkins & Simpson, 1906.) Standard scarlet orange, with rosy wings. E.

Elfrida.\* (Johnson, 1904.) Primrose, lightly striped rose. E.

EVENING STAR.\* (Vaughan, 1904.) Primrose, shaded light pink. E.

FAIRY QUEEN.\* (Haage & Schmidt, 1872.) White with faint carmine pencilings on throat. E.

FASCINATION.\* (Eckford, 1900.) Magenta mauve; wings deep mauve. H.

- Fashion.\* (Burpee, 1899.) A soft shade of reddish lavender, deepening at base of standard. Similar to Colonist. H.
- FINETTA BATHURST.\*\* (Bathurst-Mackereth, 1908.) Pure white. E.
- Firefly.\* (Eckford, 1893.) Scarlet crimson. E.
- Flora Norton. (Vaughan, 1904.) A beautiful rich lavender, almost a bright blue. E.
- FLORENCE FRAZER.\*\* (Vaughan, 1904.) Standard bright crimson rose; wings white tinged pink. E.
- FLORENCE MOLYNEAUX.\*\* (Dobbie, 1905.) Cream flaked with rose. E.
- GAIETY.\* (Eckford, 1893.) Standard flaked with cerise pink; wings striped rosy purple. S. H.
- GEORGE GORDON.\* (Eckford, 1901.) Claret red, self colored, but turns to a dull purple with age. H.
- GLADYS DEAL.\*\* An English name for the American variety, Mrs. Geo. Higginson. S. H.
- GLADYS FRENCH.\*\* (Unwin, 1909.) A light blue Helen Pierce.
- GOLDEN GATE.\* (Burpee, 1897.) Pinkish mauve and lavender. S. H.
- GOLDEN GLEAM.\* (Sunset Co., 1897.) Color creamy yellow. Nearly identical with Mrs. Eckford. S. H.
- GOLDEN Rose. (Burpee, 1902.) The ground color is a clear primrose yellow, beautifully flushed with rosy pink. S. H.
- GORGEOUS. (Burpee, 1899.) Standard salmon-orange; wings heavily suffused orange-salmon. E.
- GRACIE GREENWOOD.\* (Eckford, 1902.) Cream shaded with delicate pink. S. H.
- Grand Blue.\* (Éckford, 1886.) Clear, light blue color, same as Imperial Blue. H.

- Gray Friar.\* (Burpee, 1896.) Heavily shaded with watered purple markings on creamy white ground. H.
- Helen Pierce. (Vaughan, 1906.) The color is very bright blue, mottled on pure white. E.
- Henry Eckford. (Eckford, 1906.) Bright, soft, flaming orange, deepening slightly in the center of the flower. This variety requires shading with cheese-cloth to prevent scalding in bright weather. E.
- HERBERT SMITH.\*\* (Sydenham, 1908.) A bi-color after the style of Evelyn Byatt. E.
- HER MAJESTY. (Eckford, 1893.) Rosy pink. H.
- HESTER.\*\* (Hemus, 1907.) Blue striped, and appears to be the same as Marbled Blue. E.
- HETTY GREEN.\* (Ward-Bolton, 1907.) Bright orange scarlet; wings rosy crimson. E.
- HILDA JEFFERY.\*\* (Breadmore, 1907.) Color creamy rose. S. H.
- Hon. F. Bouverie. (Eckford, 1899.) Pinkish salmon standard; wings shaded to a lighter salmon-buff. S. H.
- Hon. Mrs. E. Kenyon. (Eckford, 1901.) A beautiful primrose color. E.
- Horace Wright. (Eckford, 1907.) A self. A rich violet blue color. S. H.
- Hannah Dale.\*\* (Dobbie, 1908.) A large, rich maroon self. S. H.
- H. J. R. Digges.\* (Eckford, 1908.) Bright claret shaded maroon. S. H.
- lgnea.\*\* (Eckford, 1892.) Bright scarlet crimson with purple wings. S. H.
- IMPERIAL BLUE.\* (Eckford, 1886.) Blue and mauve, same as Grand Blue. H.

IMPERIAL PURPLE.\* (Introducer and date of introduction unknown.) Purple with blue shading. E.

Inconstancy.\*\* (Ferry, 1902.) White and primrose flowers on same plant. E.

INDIGO KING.\* (Eckford, 1885.) Dark maroon purple standard with indigo blue wings. Autocrat is synonymous. H.

Invincible Black.\* (Introducer unknown, 1871.)

Dark claret. E.

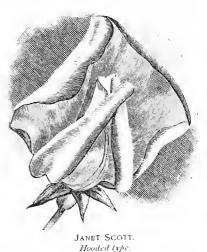
Invincible Blue.\*
(Laxton, 1888.)

Dark blue. E.

Invincible Carmine.\* (Laxton, 1885.) A brilliant, glowing carmine. E.

INVINCIBLE STRIP-ED.\* (Carter, 1874.) Crimson striped white. E.

Invincible Scar-Let.\* (S. Brown-Carter, 1866.) Crimson scarlet. E. S.



Invincible Scarlet Striped with White.\* (Introducer and date of introduction unknown.) Red, striped with white.

Isa Eckford.\* (Eckford, 1886.) White suffused

rosy pink. E.

IVY MILLER.\*\* (Miller, 1908.) White edged with blue. S. H. Similar to Maid of Honor.

- Janet Scott. (Burpee, 1903.) This might be called a new shade of rich pink. The unusual size of the wings, with the large, substantial, hooded standard, give the flower an appearance of enormous size. H.
- Jeannie Gordon. (Eckford, 1902.) Standard rose, shaded cream; wings creamy suffused rose. S. H.
- Jessie Cuthbertson. (Dobbie, 1903.) Flaked and striped salmon rose on a cream ground. S. H.
- JET. (Aldersey-Sydenham, 1909.) Similar to Midnight.
- Josephine White.\*\* (Ferry, 1902.) White. E.
- JUANITA.\* (Burpee, 1896.) Color pure white, delicately lined and striped with pale lavender. H.
- J. T. Crier.\* (Breadmore, 1907.) A lavender self.
- JAMES GRIEVE.\*\* (Eckford, 1908.) A large sulphur yellow. E.
- KATHERINE TRACY.\* (Ferry, 1896.) Soft, rosy pink, lighter at edges. E.
- King Edward VII. (Eckford, 1903.) A bright crimson self, large, with three flowers borne on a strong, stout stem. S. H.
- LADY ABERDARE.\* (Breadmore, 1904.) Soft, light pink, self colored. H.
- Lady Beaconsfield.\* (Eckford, 1892.) Standard salmon pink; wings primrose yellow. E.
- LADY COOPER.\*\* (Breadmore, 1906.) A clear, lavender self. S. H.
- Lady Grisel Hamilton. (Eckford, 1899.) Light lavender standard with azure blue wings. H.
- LADY MARY CURRIE. (Eckford, 1898.) A deep orange pink. H.
- Lady M. Ormsby-Gore. (Eckford, 1901.) Pale buff tipped deep buff, overlaid with delicate pink. H.

- **Lady Nina Balfour.** (Eckford, 1897.) Delicate mauve shaded dove gray. H.
- LADY PENZANCE.\* (Eckford, 1894.) Rose pink, tinged orange-salmon. H.
- LADY SKELMERSDALE.\* (Eckford, 1899.) Light carmine standard, shading to white. S. H.
- Lemon Queen.\* (Eckford, 1892.) White tinted with lemon and blush. E.
- LIGHT BLUE AND PURPLE.\* (Introducer unknown, 1700.) Dark maroon with blue shadings. E.
- LITTLE DORRIT.\* (Eckford, 1897.) Standard clear rosy pink; wings white, suffused rose. E.
- LORD KENYON. (Eckford, 1900.) Bright rose pink. H.
- Lord Nelson. (House, 1907.) A rich, deep navy blue. This is identical with Burpee's Brilliant Blue. E.
- LORD ROSEBERY. (Eckford, 1902.) A self colored rosy magenta. H.
- LOTTIE ECKFORD. (Eckford, 1894.) White ground, delicately edged lavender blue. H.
- LOTTIE HUTCHINS.\* (Burpee, 1898.) Flaked pink on cream ground. S. H.
- LOVELY. (Eckford, 1895.) Pink; wings delicate rose. H.
- MADAME CARNOT.\* (Laxton, 1892.) A blue self. H. MAJESTIC.\* (Burpee, 1901.) Standard is a deep rose pink, while wings are also deep rose but rather softer in tone. H.
- MAID OF HONOR. (Burpee, 1897.) Light blue on a white ground, shaded and edged. Similar to Lottie Eckford but a better flower. S. H.
- Marchioness of Cholmondeley. (Eckford, 1904.) Soft shade of cream overlaid with pink. H.

- MARS.\* (Eckford, 1895.) Rich crimson self. H.
- MARBLED BLUE.\*\* (Sutton, 1906.) White, striped and flaked blue. E.
- May Perrett.\*\* (Eckford, 1908.) Ivory flushed with buff. E.
- Memento.\*\* Synonymous with Flora Norton. E.
- METEOR.\* (Eckford, 1895.) Orange-salmon standard with pink wings. E.
- MIKADO.\* (Eckford, 1896.) Rose crimson striped with white. H.
- MILDRED WARD.\*\* (Sydenham, 1907.) Orange-scarlet. E.
- Millie Maslin. (Sydenham, 1908.) Rich rosy crimson self. Very much deeper than Prince of Wales. S. H.
- MIMA JOHNSTON.\*\* (Eckford, 1908.) Bright rose carmine. E.
- MISS BOSTOCK.\*\* (Hemus, 1907.) Cream and pink. H. MISS H. C. PHILBRICK.\*\* (Stark, 1905.) Mauve overlaid with clear blue. We consider this identical with Flora Norton. E.
- Miss Hunt.\* (Eckford, 1887.) Standard pale carmine salmon; wings soft pink. E.
- Mid Blue. (Dobbie, 1909.) Of medium size; color deep, sky-blue. E.
- Midnight ("Jet"). (Burpee, 1908.) Standard deep purplish maroon, almost black; wings darkest claret. S. H.
- Miss Willmott. (Eckford, 1901.) Rich orange pink; delicately shaded rose. S. H.
- Modesty. (Burpee, 1898.) In strong sunlight it is seemingly a silvery white, but the suffused pink tint is shown on closer examination. H.

Monarch.\* (Eckford, 1891.) Standard bronzy crimson; wings, violet. H.

MONT BLANC. (Benary, 1900.) Extremely early flowering,—white. E.

Mother o' Pearl.\*\* (Sydenham-Aldersey, 1909.) Silvery lavender. S. H.

Mrs. A. Malcolm.\*\* (Malcolm-King, 1909.) Primose self. E.

Mrs. Bieberstedt.\*\* (Beiberstedt, 1908.) A lovely deep lavender self. S. H.

Mrs. Charles Masters.\*\* (Eckford, 1909.) Standard rosy salmon; wings cream.

Mrs. Collier. (Dobbie, 1907.) In form and substance it resembles Dorothy Eckford. The flowers are large, coming in threes and fours on long, stiff stems and of a rich, primrose tint, entirely free from any trace of pink. S. H.

Mrs. Dugdale. (Eckford, 1899.) Light carmine rose, with faint markings of primrose. S. H.

MRS. ECKFORD. (Eckford, 1891.) A primrose self. S. H.

Mrs. Fitzgerald.\*\* (Eckford, 1900.) Buff flushed with a tinge of pink. Synonymous with Stella Morse. S. H.

Mrs. George Higginson, Jr. (Vaughan, 1904.) A very delicate lavender. E.

MRS. GLADSTONE.\* (Eckford, 1890.) Soft flesh pink.

Mrs. H. Kendall-Barnes.\*\* (Dobbie, 1905.) Standard rich apricot; wings creamy buff. S. H.

MRS. Jos. CHAMBERLAIN. (Eckford, 1895.) Ground color is a clear silvery white, brightly striped soft rosy pink. S. H.

- MRS. KNIGHT-SMITH.\*\* (Eckford, 1904.) A pink self, hooded with large open wings. Not fixed. H.
- MRS. R. F. FELTON.\*\* (Bolton, 1907.) Primrose yellow self. Synonymous with Mrs. Collier. S. H.
- MRS. R. M. SHELTON.\*\* (Baker, 1909.) Rosy carmine self. H.
- Mrs. Sankey.\* (Eckford, 1890.) Pure white: black seeded. H.
- Mrs. Walter Wright. (Eckford, 1903.) The standard is a beautiful shade of mauve, clear and bright, while the wings are a bright cœrulean blue, slightly shaded with the mauve color of the standard. H.
- MRS. WILCOX.\*\* (Gilbert, 1909.) White, striped bright red.
- Navy Blue. (Burpee, 1899.) General color effect dark 'blue; standard brilliant royal purple; wings pure violet; the whole flower elegantly veined in sharp relief. S. H.
- New Countess. (Burpee, 1897.) Pure light lavender throughout both on standard and wings. An Improved Countess of Radnor in which is eliminated the reddish cast in standard. H.
- Novelty.\* (Eckford, 1895.) Standard orange rose; wings delicate mauve. E.
- NYMPHAEA.\* (Vaughan, 1904.) White turning to pink. S. H.
- Nigger.\* (House, 1905.) Very dark maroon, nearly black. H.
- ODDITY.\* (Burpee, 1896.) Pale carmine edged with bright rose. S. H.
- Orange Prince.\* (Eckford, 1886.) Bright orange pink. E.

- Oregonia.\* (Walker, 1895.) White striped with brownish red. S. H.
- ORIENTAL.\* (Burpee, 1898.) Rich orange flowers. H. Othello. (Eckford, 1899.) A deep maroon self color; very large size; standard slightly hooded. S. H.
- Ovid.\* (Eckford, 1894.) Bright rosy pink with crimson veins in both standard and wings. H.
- PAINTED LADY.\* (Introducer not known, 1700.) Standard rose; wings white tinged with pink. E.
- PEACH BLOSSOM.\* (Eckford, 1894.) Light salmon pink and buff. E.
- PHENOMENAL. (Henderson, 1905.) White, shaded and edged lilac. E.
- PINK FRIAR.\* (Burpee, 1899.) White, lightly marbled light rose crimson. Large size. H.
- Prima Donna. (Eckford, 1896.) A pure pink self. H. Primrose.\* (Eckford, 1889.) Primrose self. E.
- Princess Beatrice.\* (Hurst, 1883.) A light pink self. Syn., Carmine Rose. E.
- Princess Louise.\* (Introducer and date of introduction unknown,—probably first offered in 1895.)

  Magenta-pink standard; lilac wings. E.
- Princess May.\* (Laxton, 1893.) Pale mauve standard; lavender wings. E.
- Princess of Wales.\* (Eckford, 1885.) White striped mauve and purple. H.
- Princess Maud of Wales.\*\* (Eckford, 1906.) A pale colored Coccinea. E.
- Princess Victoria.\*\* (Eckford, 1891.) Cerise standard; wings more pink. E.
- PRINCE EDWARD OF YORK. (Eckford, 1897.) Crimson scarlet standard. Crimson wings; large open form. E.

- Prince of Wales. (Eckford, 1898.) A large, bright rose self. S. H.
- Purple King.\*\* (Eckford, 1908.) Purple, shaded indigo. E.
- Purple Prince.\* (Eckford, 1886.) Standard dark maroon; wings purple. H.
- Purple Striped.\* (Introducer and date of introduction unknown.) An old variety; purple striped on white ground. E.
- PINK SNAPDRAGON.\* (Burpee, 1903.) Soft shell pink. PURPLE.\* (Introducer and date of introduction unknown.) A rich shade coming between Boreatton and Black. E.
- PURPLE BROWN.\* An old dark-striped form.
- Prince Olaf. (Dobbie, 1908.) The bold, effective flowers are striped and mottled bright blue on white ground; of good size with erect standard. E.
- Queen Alexandra. (Eckford, 1906.) An intense bright scarlet self. E.
- QUEEN OF ENGLAND.\* (Eckford, 1887.) White self. E.
- QUEEN OF PINKS.\*\* (Sutton, 1901.) Pure salmon pink. S. H.
- Queen of Spain. (Eckford, 1907.) A new pearly pink self. S. H.
- Queen of the Isles. (Eckford, 1885.) Crimson scarlet striped on a white ground. S. H.
- QUEEN VICTORIA. (Eckford, 1897.) A light yellow or primrose self. H.
- RAMONA.\* (Burpee, 1896.) Light pink, striped on a white ground. S. H.
- RED RIDING HOOD.\* (Sunset Seed and Plant Co., 1897.) Snapdragon form; crimson.

REGINA.\*\* (Bolton-Sharpe, 1908.) A large maroon self. E.

RISING SUN.\* (Laxton, 1892.) Standard a bright, rosy orange; blush wings. E.

Romolo Piazzani. (Eckford, 1905.) A violet blue self of large size. S. H.

ROYAL ROBE.\* (Eckford, 1894.) A light pink self. H.

ROYAL ROSE. (Eckford, 1896.) Standard crimson

pink, deepening at center; wings pink. S. H.

Rose Queen.\*\* (Stark, 1905.) A rosy pink self. S. H.

SADIE BURPEE W. S. (Eckford, 1899.) Pure white flower of large size. H.

SADIE BURPEE 'B. S. (Eckford, 1899.) Pure white, the flowers show a delicate pink flush in the standard when first opened. H.



ECKFORD'S "SADIE BURPEE."

Intensely hooded type.

Saint George. (Hurst, 1908.) Scarlet orange self; large and very bright; awarded the Silver Medal of the National Sweet Pea Society, 1907. A great improvement on Gorgeous and Evelyn Byatt. E.

Salopian. (Eckford, 1897.) A rich, dark crimson self.

SCARLET GEM. (Eckford, 1904.) Bright scarlet. E.

- SCARLET STRIPED WITH WHITE.\* (Introducer and date of introduction unknown.) One of the old varieties and discarded some time ago.
- Salvation Lassie.\* (Burpee, 1902.) Light carmine, the standard and wings both hood like a Salvation Army bonnet.
- Sensation.\* (Burpee, 1898.) Standard pink and buff. Wings white. S. H.
- SENATOR. (Eckford, 1891.) Creamy white ground, striped chocolate. H.
- Shahzada.\* (Eckford, 1897.) Dull maroon, shaded purple. S. H.
- Shasta. (Morse, 1905.) When first opening the flowers have a creamy tint which changes to an ivory white when fully expanded. E.
- SNAPDRAGON.\* (Burpee, 1900.) White shaded pink; flowers are like a Snapdragon bud.
- Speckled Beauty.\* (Vaughan, 1904.) Primrose ground, marbled with crimson. H.
- Splendid Lilac.\* (Of German origin, first offered in 1869.) Dull purple magenta standard; wings white, tinged lilac. E.
- Splendour.\* (Eckford, 1887.) Deep rosy crimson self, with slightly paler wings. H.
- STANLEY. (Eckford, 1890.) Self colored in darkest maroon of burnished tint. F.
- STARK'S ELEGANCE.\* (Stark, 1909.) White, feathered with bright orange scarlet. E.
- STELLA Morse. (Burpee, 1898.) Has a faint tinge of pink underlying the cream, producing a true apricot shade. H.
- Sue Earl.\*\* (Burpee, 1903.) Standard primrose, with mauve edges; wings primrose. H.

Sunbeams, Earliest. (Burpee, 1904.) This might be described as a primrose "Mont Blanc." The flowers are of a rich primrose color and generally borne three on a long stem. E.

Sunproof Salopian. (Burpee, 1900.) This was the

finest scarlet until the introduction of King Edward VII and Queen Alexandra. H.

SUNRISE.\*\* (Vaughan, 1904.) A bright pink on primrose ground. E.

Sunset.\*\* (Vaughan, 1904.) Primrose striped dark rose. H.

Sybil Eckford. (Eckford, 1906.)
Standard creamy
buff with slight
pink or apricot,
large, open,
creamy wings. E.

THE BRIDE.\*
(Lynch, 1897.)
White self. S. H.



EARLIEST SUNBEAMS. Early-flowering type.

THE FAIRY.\*\* (Johnson, 1907.) Lavender and white on same stem.

THE QUEEN. (Eckford, 1886.) Rosy pink, reflexing standard, shaded with mauve. E.

- True Lavender.\*\* (Bath, 1909.) In color same as Mrs. George Higginson, Jr. Standard notched on sides.
- **Triumph.** (Eckford, 1897.) Creamy white ground, suffused with salmon pink and tinged with carmine. E.
- Tweedy Smith.\* (Breadmore, 1906.) Standard rose pink; wings rose suffused pink. H.
- UNIQUE. (Stark, 1906.) White ground, striped pale lavender blue. S. H.
- Venus. (Eckford, 1891.) Lovely salmon buff, shaded with rosy pink. H.
- Vesuvius.\* (Laxton, 1888.) Claret color, shading lighter at the edges. E.
- VIOLET QUEEN.\* (Carter, 1877.) Clear violet color. E.
- Waverly.\* (Eckford, 1892.) Rosy claret standard, blue wings. H.
- WAWONA.\* (Burpee, 1898.) Striped lavender lilac on a white ground. H.
- WHITE SNAPDRAGON.\* (Burpee, 1902.) White snapdragon-like flowers.
- White Wonder. (Burpee, 1904.) The flowers are pure white and of largest size and sometimes borne six to eight on a long, stout stem, many of the flowers being double. E.
- YELLOW HAMMER.\*\* (Breadmore, 1909.) Sulphur yellow.
- ZARINA.\*\* (Hemus, 1908.) A pearl pink self, being an expanded form of Queen of Spain. E.
- Zero.\*\* (Hemus, 1907.) An early pure white. E. Zoe.\*\* (Biffen-Unwin, 1906.) A clear, shining blue.
  - Similar to Mid Blue. E.

# CUPID SWEET PEAS

This distinct type of dwarf Sweet Peas was introduced by W. Atlee Burpee & Co. in 1896 and does well in dry seasons and on soils which become hard during hot weather. The plants are of low, spreading habit with dense green foliage and attain a height of from six to nine inches. The plants root deeply and flower most freely in hot, dry seasons. They are also adapted for pot culture, but in growing them the foliage should never be watered; always water round or between the plants. A peculiarity about the Cupids is that they are quite devoid of fragrance.

At one time there was listed fully twenty varieties, but now only the following are offered by us:—

PINK CUPID WHITE CUPID MIXED CUPID

### BURPEE'S BUSH SWEET PEAS

The plants are semi-erect, fifteen to eighteen inches high when in full flower, but branching freely so that the close bushes are frequently fifteen inches and more in diameter, composed of short erect branches with abundant light-green foliage. The tendrils at ends of the leaves clasp themselves closely to the adjoining branches, so that the whole plant is held quite erect though sufficiently open to admit of a freer circulation of air than in the low compact form of the Cupid type.

As these have not met with the success anticipated, they have been discarded. We understand in some parts of England florists are growing these for cutting with larger part of foliage.

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#### THE BEST SWEET PEAS

So much depends on the personal taste or fancy of the expert that it would be absurd to say arbitrarily that any set of varieties were the *very best*. However, to assist the novice, the following lists of varieties (introduced up to 1909) are suggested:

BEST TWELVE VARIETIES OF "SPENCERS"

Countess Spencer . . . . . Pink

Florence Morse Spencer . Blush

King Edward Spencer...Crimson Scarlet Mrs. Routzahn .......Apricot and Pink

Helen Lewis......Orange

George Herbert ...... Rosy Carmine

Asta Ohn.....Lavender

Primrose Spencer..... Light Yellow

White Spencer......White Othello Spencer.....Maroon

Apple Blossom Spencer . Rose and blush

Aurora Spencer........White striped Orange-Salmon

These are all of the Spencer type and make a magnificent dozen for any purpose.

# BEST TWELVE VARIETIES OF THE OLDER OR GRANDI-FLORA TYPE

Dorothy Eckford......White

King Edward VII......Crimson

Lady Grisel Hamilton. Lavender

Black Knight..... Maroon

Hon. Mrs. Kenyon.....Primrose Brilliant Blue.....Blue

#### VARIETIES FOR TRUCKERS

Janet Scott ....... Pink

Helen Pierce...... ... Marbled white and blue

St. George . . . . . Orange Queen Alexandra . . . . Scarlet

Jeanie Gordon..... Cream and pink

Mrs. Walter Wright.....Mauve

# VARIETIES FOR TRUCKERS AND MARKET GARDENERS

Truckers and market gardeners who have a market for cut flowers are now awakening to the fact that there is money in Sweet Peas. The writer saw a letter from a trucker the other day which stated he had made \$400.00 last season from quarter of an acre of Sweet Peas. Therefore, to those in suitable locations this is surely encouragement enough to induce them to give these popular flowers a trial. We have heard of growers sowing their Sweet Peas after taking off an early crop of vegetables, but we would rather favor the method of sowing the Sweet Peas on a free piece of land as early in the spring as possible, putting up the trellising at once, and in the space between the rows planting an early crop of lettuce, radish, etc., that will be cleared away before the Peas come into flower. This plan could be altered according to location and latitude, or they might be planted in the fall; but what we would like to impress upon the grower is that it is no use expecting best results if the seed is planted late in the spring, for to secure a long flowering season the roots must have made good growth before warm weather sets in.

As the best prices are obtained from flowers bunched in one color, it is advisable to sow named varieties, and if only six varieties are wanted to start with, we recommend the following as being as good as any for this class of trade:—

Dorothy Eckford ...... White Janet Scott ....... Pink

Countess Spencer.....Light pink

King Edward VII......Crimson Lady Grisel Hamilton...Lavender

Brilliant Blue......Blue

Or a more extended list might be made from the following:

BEST VARIETIES FOR CUTTING FOR MARKET

Early Varieties

Burpee's Earliest White . White

Burpee's Re-Selected

Earliest of All.. .... Pink and white

Burpee's Earliest Sun-

beams......Primrose

Le Marquis or Christmas

Navy Blue... Bright blue Mrs. A. Wallace ... Lavender Mrs. Wm. Sim. Salmon pink

White

Dorothy Eckford Shasta White White Wonder

Nora Unwin White Spencer

Primrose

Hon. Mrs. E. Kenyon

Primrose Spencer

Pink

Janet Scott Prima Donna

Countess Spencer
Florence Morse Spencer

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Rose

Prince of Wales

Mrs. Dugdale

Crimson and Scarlet

King Edward VII Queen Alexandra

Salopian (Sunproof Strain)

Chrissie Unwin

Lavender and Light Blue

Countess of Radnor Flora Norton Lady Grisel Hamilton Mrs. Geo. Higginson, Jr.

Orange-Pink and Salmon

Bolton's Pink Saint George

Miss Willmott

Blue and Purple

Brilliant Blue Countess Cadogan

Romolo Piazzani

Maroon

Black Knight

Othello

Striped and Mottled

Helen Pierce

Aurora

# EXHIBITING SWEET PEAS

Intending exhibitors must keep the blooms hard cut from the vines until, say, three days previous to the date of the show, and all varieties that are likely to scald with the sun should be shaded with cheese-cloth or other light material, as in close competition a single scorched flower might make all the difference between a first or second prize.

Varieties that have orange in their colorings (such as Henry Eckford, Saint George, Helen Lewis), the scarlets, and the blues, should all be protected. The blooms should be cut at the last possible minute, choosing whenever practicable the early morning or the evening, putting the flowers immediately into water and placing in a cool room or cellar until packed. Pick only young, fresh blooms with the last flower just open or in the opening stage, as should you be cutting the day previous to the show, it will be fully expanded by the time the judges come around. Cut with as long stems as possible. The ideal spray should have a stem of from eighteen to twenty-four inches long with four good flowers on it. Therefore, aim at the ideal.

In staging the flowers never crowd them. Let every flower "speak for itself." Twenty sprays make a nice vase, and the best method of arranging them is to start by putting some grass (cut two inches long) in the mouth of the vase, as this helps to keep the stems in position. Each stem must be put in separately. Let every flower be seen as far as possible and all face one way, with the exception of such varieties as have the back of the standards tinted in coloring other than the ground color of the flower, when the position of such might be judiciously varied. One or two pieces of foliage—a little Gypsophila—or light grass, such as Agrostis Nebulosa, might with advantage be used. But this should not be overdone, and only if the rules allow of it.

In staging a collection of twelve varieties, they should be stood in three rows, the back rows being tiered eight or nine inches above the other, and arrange the colors so that they do not clash. Even if the show

schedule does not ask for it, name each variety with a neat card placed at the base of each vase.

During very hot or stormy weather, some exhibitors cut their flowers in the bud stage or partly open and allow them to fully expand in water, adding about a quarter of an ounce of sulphate of iron to three gallons of water.

# SWEET PEAS FOR TABLE AND OTHER DECORATIONS

Few flowers lend themselves so readily to the decorator's art as does the fragrant Sweet Pea. They require no wiring or stiffening of the stem—once they are cut, they are ready for the deft fingers to create charming effects for any purpose.

Pretty effects may be had by associating two colors that harmonize, though perhaps nothing is daintier than a table decorated with one variety only—say, the beautiful Countess Spencer. A lovely combination may be obtained by using Henry Eckford and Mrs. Collier, or a crimson and a yellow. Lavender and blue Sweet Peas look dull under artificial light, though very pleasing at other times. Or, again, various shades of pink, from light to dark, form a nice harmony of color tints.

In arranging the flowers let all be as light and airy looking as possible; never jam the sprays closely together; strive to let every flower be seen. Allow a few flowers to stand well above the others, which tends to give all a natural appearance. A few sprays of colored lycopodium allowed to trail over the sides of the receptacles and arranged on the table, or sprays

of asparagus, smilax or other light greenery, all help the general effect, while light grasses and a little of their own foliage inserted among the flowers will lend grace and elegance to the arrangement—if not overdone.

# From the Sweet Pea Annual for 1906

A New Year's Card—Mr. George Stanton's greeting to the Secretary of the N. S. P. S. was as follows:—

"Sweet Pea Culture condensed—twelve words: Trench deeply; manure liberally; plant thinly; stake quickly; water freely; dispod promptly. With best wishes for the success of the National Sweet Pea Society in 1906."



OTHELLO SPENCER,—from a Photograph.
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Some Remarks from our Friend and Sweet Pea Enthusiast, Rev. W. T. Hutchins, formerly of Indian Orchard, Mass., but now Located at Santa Rosa, Calif.

### To Sweet Pea Lovers Everywhere:

I am to have the pleasure of contributing a word to the book that Messrs. Burpee & Co. are preparing on sweet peas. Several years ago I wrote for Mr. Burpee two little books on sweet peas, and at that time there was a great wave of popularity which increased the sale of sweet pea seed tremendously, and we then thought that the flower had attained its highest development. Mr. Eckford's name had become everywhere known as the creator of a new type of this flower and his new forms and colors were received by the American public with great enthusiasm. Mr. Burpee led the seed trade in introducing Mr. Eckford's novelties, and from time to time added to them other beautiful varieties of American origin. The interest that was then kindled in sweet peas has never died down, but the immediate occasion of new literature on this subject is that we are again at the initial stage of another very popular wave of interest in this most beautiful flower. Mr. Burpee is again at the front, and has with the most unstinted confidence recognized that a still more beautiful race of sweet peas has made its advent. The race referred to is what is called the Spencer type, and its coming will not displace the beautiful grandiflora form, but will largely increase the scope of pleasure which this flower affords us. It is a very distinct type, and from the number of new varieties already introduced we see that it is even more lovely in form than the finest varieties we already had. The flowers open in a larger and more expanded form and the blossom disposes its newer grace in a waved and fluted standard and expanded wings. It began in the Countess Spencer, a lovely pure pink, and the specialists in England and America are now devoting their most skilful efforts to obtain all the colors and fancy markings of this flower in this new Spencer form.

After devoting all my leisure time for a good many years to sweet peas I was compelled for a while to drop all my flower interests, but now again I feel all my old enthusiasm under conditions that greatly enhance my I am in California now. pleasure in this favorite flower. where soil and climate conduce to well-nigh unbounded success in growing this beautiful flower at its very best. The larger part of the sweet pea seed produced for the world's trade is grown here in California, and Mr. Burpee wants me to tell of my experience, because I make frequent visits to the great seed ranches in this State, where he has his imported novelties grown for trial, and where the largest experimental work is done on this flower. My experience includes the work of going all over the grounds, not only taking in trials but also observing crops and making notes for the floral trade journals.

I grow personally a list of varieties that keeps me in immediate acquaintance with the best that is offered. The height of the season of 1909 has just passed with me, and I have revelled in sweet peas as never before.

Growing them for the best garden effect, my vines of healthiest green and strongest growth have gone to a height of nine to ten feet, and have not only filled my cup of pleasure to the brim with their lavish bloom, but have, as fast as I and my neighbors could cut them, bloomed and rebloomed in apparent mockery of all our efforts. We have no sweet pea disease to contend with, and being in a position to supply the essential conditions of location and soil and generous culture, we get nature's most liberal reward. I do not think any other flower to-day compares in the pleasure afforded one by the growing of sweet peas. I live in Santa Rosa, the "City of Roses," but I think my sweet peas this year have excited more attention than the roses. I am preparing now to plant for next season two hundred of the best sorts.

Now, I would like to make a prudent distinction between the matter of my own experience and what I would advise for others. As for my own experience, I want just as many of the Spencer varieties as I can get. I know their merit and am not troubled if some of the newest ones do not come entirely true, as we are yet in the early stage of this new class of sweet peas. I have seen enough of them to know that the Spencer type is worthy of great admiration, but they ought not to displace the best of the old grandiflora sorts, for my opinion is that if any one buys the White Spencer, they should also have Dorothy Eckford, and it is no great loss if some of the new sorts drop back into the grandiflora form. By getting the Spencer stock one is pretty sure to get at least a strong hybridized quality of flower, and for those who can afford to do it, I would advise their getting the Spencer

varieties just as fast as they are gotten ready for distribution. They are certainly beautiful! They are grand! As you cut them they hold your mind in a state of the keenest zest. It is the very music of floriculture to now pass from color to color and pick a stem of each. I know I am not an abettor of any seedsman's trick when I commend in enthusiastic terms the new Spencer varieties. The English specialists are now in a high pitch of excitement over them, and I have revelled in them at the trial grounds here in California, and yet, owing to the more popular price of the seed of the grandiflora varieties, I could let my enthusiasm drop back to them. They too are beautiful and the quality of the stock is held up to a praiseworthy mark. Every color can be had in this form, and by getting one's seed in named packets and from a reliable dealer your neighbors will even wonder where such sweet peas can be found.

I still am annoyed, even here in California, with great aversion of feeling as I see in so many yards the old inferior sorts given a place which ought to be given to the improved varieties, and I feel sorry for the women who cannot persuade their men folks to thoroughly prepare a place for this beautiful flower, so that they must needs go on planting along some side of the house or fence, where there is no depth or fertility to the soil. There is such a rich reward for taking a spade and throwing out the soil eighteen inches deep and making it new again with the right kind of manure and fresh earth. What a trifling labor for a man to get a place ten feet long in right condition, and then for three months the pleasure of cutting the blossoms makes one feel that life is restored with a new lease. A large

part of the satisfaction in growing this flower is in giving them a good trellis or support. In the east I used good birch brush, but here I make a wire trellis. I set strong supports about ten feet apart and as high as I calculate the vines will grow. Then I stretch No. 20 wire, attaching the strands about four inches apart. This makes a good trellis. I do not consider this much of a task, even for 300 feet of row, and the effect is grand. If the vines do not readily attach themselves to the wire, I weave in a few strings and draw them up.

The culture I give the vines makes a very strong growth. I intend that my plants shall stand about five inches apart and I plant the seed in triple rows, so that 21 seeds would make about three feet of row. Even this is closer planting than some experts practise. To make sure of every plant coming, I first put my seed into separate papers and bury the packets for about a week, covering them an inch deep. At the end of a week's time I uncover the packets and select the seed that has begun to germinate and plant them just as I want them. This insures just the stand of plants you want, and the method protects some of the seed that needs special treatment. The more expensive the seed, the more care must be taken in germinating. Of course, cheap seed can be sown in the old way and thinned out.

Now comes the question of irrigation. Sweet peas need a great deal of water. I prepare my rows so that they will stand in hollows, allowing the water to soak in about the roots. Watering, when done, must be done very thoroughly, and after the blooming season commences is the time to give the vines extra food. Wash-suds are excellent, or some carefully diluted fertilizer can be used. I must emphasize the old rule—keep all pods off the vines if a long season of bloom is wanted. I have been very much gratified the past season with the results of some of my rows that had only the morning sun. Varieties that burn in the full exposure of the sun did not suffer at all in these rows.

I do not know how I could live without my sweet peas. They are beautiful messengers of good-will, and I make just as many friends as I can by distributing bouquets of flowers, and all through the season I try to keep in the public library a fresh bunch of this beautiful flower. Each Sunday after services eager hands wait for the bunches that have decorated the church. My season of bloom this year will be about four months, and then in September I begin to plant again, but most of my sowing is done in October or November, and then in March I plant seed of the very latest novelties.

W. T. HUTCHINS.

Santa Rosa, Calif., August 11, 1909.



The late HENRY ECKFORD, V. M. H., Who died at Wem, England, December 5, 1905, aged 82 years.

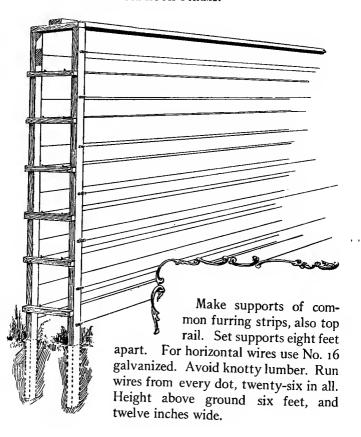
While other men, including his son, are doing good work on the sweet pea, it was he alone who blazed the way for others to follow. Born in Scotland at Stonehouse, near Edinburgh, on May 17, 1823, he began as an apprentice in 1839 in the Gardens of Lord Lovat, Beaufort Castle, Inverness. In 1854 he was appointed head gardener to the Earl of Radnor at Coleshill, Berkshire, where during his stay of twenty years he raised many new dahlias, pelargoniums and verbenas. In the year 1878 he accepted the invitation of Dr. Sankey to take charge of his gardens at Sandywell, Gloucester, with the view of raising new seedlings of florists' flowers. At this time no one had thought of any radical improvement in sweet peas and Mr. Eckford's magnificent work was begun in 1879.

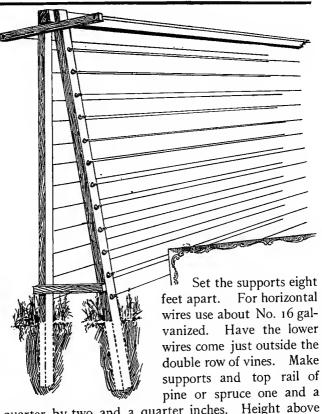
As long as the sweet pea is cultivated the name of HENRY ECKFORD will be cherished and revered. To few men is it possible to do so

much for their day and generation.

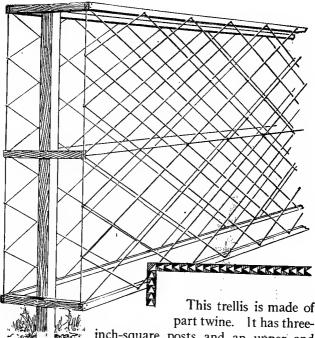
### **TRELLISES**

For those who prefer a trellis, we give illustrations of four of the most practical, such as have given entire satisfaction at Fordhook Farms.



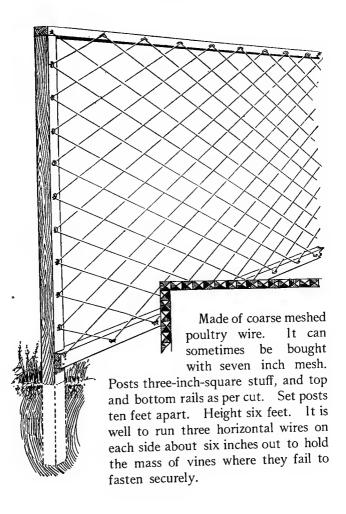


quarter by two and a quarter inches. Height above ground six feet, and twelve inches wide at base.



inch-square posts, and an upper and lower frame of furring strips. At each end are two perpendicular wires of No. 10 galvanized, and running lengthwise are two horizontal wires of the same. The diamond work can be made of strong twine, and should be fastened

both at the middle wire and top and bottom strips. Have the rows of vines come inside. Set posts eight feet apart. One foot is enough for width.



### FOUR "DON'TS."

Don't expect Sweet Peas to thrive in soil too poor for any other culture, or in a sunless location. They need, as nearly as possible, a free deep loam, moderately rich and freely cultivated.

Don't sow too shallow. Plant the seed not less than two inches deep, and when the plants are two or three inches high draw the soil up to them in ridge form.

Don't overfeed. With a view to obtaining vigorous growth and profusion of bloom, bone, in some form, is the best fertilizer. Nitrate of soda will do for a "hurry-up" stimulant, should such be needed; but use it sparingly.

Don't gather the blooms grudgingly. The more you cut the longer the vine will continue to flower. Remember, when they go to seed Sweet Peas will cease flowering.

### **APPENDIX**

#### **NEW SPENCER SWEET PEAS**

The following includes—so far as we know—all varieties introduced since the list given on pages 27 to 37 was compiled, and although we know that many of them will never become popular or be offered commercially, a description of these later introductions will doubtless be of interest to Sweet Pea enthusiasts.

A. A. Fabius. (Alsen, 1910.) Glowing rose.

A. B. Bantock. (Baker's, 1910.) Creamy buff and pink, shaded amber.

Afterglow. (Bolton, 1911.) Reddish-mauve with violet wings.

AGNITA. (Cantley, 1912.) White, flushed lilac.

Albert Gilbert, (Gilbert, 1910.) Rose self, similar to Marie Corelli.

ALPHA. (Breadmore, 1912.) Pale lilac self.

ALTHORP CREAM. (Cole, 1910.) Similar to Primrose Spencer.

ALTHORP WHITE. (Cole, 1910.) Similar to White Spencer.

AMBER. (Aldersey, 1912.) Fawn color.

AMETHYST. (Aldersey, 1910.) Violet blue.

A. N. Dickson. (Breadmore, 1911.) Rosy-lilac with purple wings.

Anglian Crimson. (King, 1910.) Crimson self.

Anglian Lavender (King, 1911.) Deep lavender, suffused pink

Anglian Orange. (King, 1911.) Salmon-pink.

Anglian Pink. (King, 1911.) Salmon-pink on cream ground. Similar to Miriam Beaver.

Annis Gibson. (Breadmore, 1912.) Purplish-mauve.

ARTHUR GREEN. (Dobbie, 1911.) Bronzy-brown with violet wings.

ARTHUR UNWIN. (Unwin, 1910.) Salmon rose with buff wings.

ASHANTEE. (Stark, 1912.) Reddish maroon.

Austin Frederick. (Woodcock, 1911.) Pale lavender, waved.

AVALANCHE. (Lumley, 1912.) White self.

BARBARA. (Holmes-Sydenham, 1912.) Salmon-orange self.

BEND OR. (Aldersey, 1912.) Salmon standard, rose wings.

BERTHA MASSEY. (Bide, 1911.) Rosy-lilac self.

BERTIE USHER. (Usher, 1912.) Violet flake, on white.

BERTRAND DEAL. (Deal, 1910.) Rosy-mauve self. BERYL. (Aldersey, 1912.) Creamy-pink self.

BETTY CAUTLEY. (Cautley, 1911.) Peach, shaded salmon.

BETTY. (Dobbie, 1912.) Purplish-mauve.

BIRD OF PARADISE. (Hemus, 1912.) A Helen Pierce Spencer.

BLACK KNIGHT SPENCER. (Stevenson, 1910.) Shining maroon.

BLUE FLAKE SPENCER. (Box, 1912.) Blue flake on white.

BLUE JACKET. (Stark, 1912.) Deep navy blue.

- BUTTERCUP. (Lumley, 1910.) Cream self.
- CAIRNGORM. (Aldersey, 1912.) White, flushed blue.
- Captivation Spencer. (Morse-Burpee, 1912.) Rich rosy wine red.
- CATHERINE LUMLEY. (Lumley, 1910.) Orange with pink wings.
- CERISE PARADISE. (Hemus, 1910.) Similar to Coccinea Spencer.
- Charles Foster. (Bolton, 1911.) Pastel pink, shaded lavender.
- Charles Hemus. (Hemus, 1910.) Light maroon or mahogany, small.
- CHARLIE IRVING. (Breadmore, 1910.) Orange-salmon. CHASTITY. (Bath, 1912.) Large waved blush.
- CHERRY RIPE. (Gilbert, 1909.) Cerise self, similar to Coccinea Spencer.
- CHOCOLATE. (Aldersey, 1912.) Dark chocolate self.
- COCCINEA PARADISE. (Hemus, 1910.) Cerise self, similar to Coccinea Spencer.
- COCCINEA SPENCER. (Breadmore, 1911.) Bright cerise self.
- COLONEL LARNER CLARKE. (Alsen, 1910.) Purplish maroon.
- COMMANDER HUMPHREY. (Cole, 1911.) A rich puce self.
- CONTRAST. (Bath, 1910.) Blue and purple, edged white.
- CORAL. (Aldersey, 1910.) Bright pink.
- CORONATION. (Bolton, 1912.) Apricot, flushed pink, on cream ground.
- Countess of Ancaster. (Gilbert, 1910.) Deep plum self
- COWRIE. (Aldersey, 1910.) Bright pink self.

CREAM PARADISE. (Hemus, 1909.) Light primrose self.

CRYSTAL. (Aldersey, 1912.) White, flushed pale rose. CYRIL UNWIN. (Unwin, 1912.) Maroon and violet.

Daisy. (Gilbert, 1912.) Pink self, white ground.

DAZZLER. (Breadmore, 1910.) Bright glowing orange-scarlet.

DISTINCTION. (Bath, 1910.) Similar to Dainty Spencer.

Dobbie's Cream. (Dobbie, 1912.) Primrose self.

Doris Burt. (Unwin, 1910.) Crimson-scarlet self.

DORIS USHER. (Usher-Sutton, 1911.) Pink on cream ground.

DOROTHY. (Bolton, 1912.) Rosy-lilac self.

DOROTHY HARLAND. (Bide, 1910.) Pale salmon, cream ground.

Douglas Unwin. (Unwin, 1910.) Maroon self.

Dragonfly. (Aldersey, 1912.) Lavender on cream ground.

Dusky Monarch. (Breadmore, 1910.) Dark purplemaroon.

EARL CROMER SPENCER. (Bide, 1910.) Crimson-lake. EARL OF CHESTER. (Ward, 1910.) Orange.

EDITH. (House, 1912.) In the way of Helen Grosvenor with double standards.

EDITH TAYLOR. (Holmes-Sydenham, 1912.) Salmonrose self.

Edna Harland. (Bide, 1911.) Carmine-pink.

EDNA MAY. (Woodcock, 1912.) White self.

Edna Turner. (Dipnall, 1911.) Cream-pink.

Edna Unwin. (Unwin, 1910.) Orange-scarlet.

EDROM BEAUTY. (Malcolm-Dobbie, 1911.) Standard orange, wings rosy-salmon. Similar to Helen Lewis. ELAINE. (Hemus 1919.) Standard manyo wings white

Elfrida Pearson. (Pearson, 1911.) Blush pink.

ELIZABETH HEMUS. (Hemus, 1910.) Blush-pink.

EMILY ECKFORD SPENCER. (Burpee, 1910.) Bluish purple.

EMILY. (House, 1912.) Rosy mauve.

EMMIE TATHAM. (Stark, 1910.) Rich rose.

Empress. (Deal, 1910.) Rosy purple self.

Empress Eugenie. (Burpee, 1913.) Soft lavender flake on white. Awarded certificate of merit, National Sweet Pea Society, 1911.

ENID DAMERUM. (Lumley, 1912.) Chocolate self.

ERIC HARVEY. (Unwin, 1911.) Similar to Martha Washington.

Essex Beauty. (King, 1910.) Clear blue.

ETHEL ROOSEVELT. (Burpee, 1911.) Light rose-pink, striped on primrose ground.

Evangeline. (Ward, 1910.) Lavender self.

FAIR MAID. (Stark, 1910.) Flesh on cream ground.

FAULKNER'S PRIMROSE. (Faulkner, 1912.) Primrose self, black seeded.

FLAMINGO. (Aldersey, 1910.) Vermilion red.

FLORADALE FAIRY. (Burpee, 1913.) A new primrose self of great merit.

FLORENCE NIGHTINGALE. (Dickson-Burpee, 1911.)
Clear lavender self.

FLORENCE WRIGHT. (Stark, 1910.) Pure white self. FLORRIE. (Bolton, 1912.) Rosy crimson-lake.

FLOSSIE JEFFREY. (Breadmore, 1910.) Shrimp-pink

on cream ground.

FORDHOOK FAIRY. (Burpee, 1913.) White, flushed bluish-blush. Awarded certificate of merit, National Sweet Pea Society, 1911.

Frances Deal. (Deal, 1912.) Rosy-heliotrope.

FRANK UNWIN. (Unwin, 1910.) Lavender suffused mauve.

FREDA. (Breadmore, 1910.) White self.

FREDA UNWIN. (Unwin, 1911.) Light blue.

FRED FAIRBURN. (Otter, 1910.) Pink self.

G. C. WAUD. (Cole, 1910.) Crimson self.

GEORGE CURZON. (Aldersey, 1912.) Dark blue flake.

GEORGE WASHINGTON. (Henderson, 1910.) Rosecrimson self.

GIANT CREAM WAVED. (Deal, 1910.) Primrose self.

GLADYS BURT. (Unwin, 1910.) Salmon-pink, cream ground.

GLADYS COLE. (Jones & Sons, 1911.) Lavender self.

GLITTERS. (Lumley, 1910.) Orange-scarlet.

Grenadier. (Clark, 1909.) Scarlet self.

GUY HEMUS. (Hemus, 1910.) Light lavender self.

GUY LANGTON. (Lumley, 1912.) Deep bronze.

GWENDOLINE. (House, 1910.) Blue self.

HARRY BALFOUR. (Jarman, 1910.) Orange self.

HELEN GROSVENOR. (Aldersey, 1910.) Cerise and rose on cream ground.

Helio Paradise. (Hemus, 1910.) Pale rosy heliotrope.

HERCULES. (Stark, 1910.) Large pink self.

HEREWARD. (Stark, 1910.) Pale cerise self.

HILDA. (Woodcock, 1911.) Orange-scarlet, rose wings.

HOLDFAST BEAUTY. (Hemus, 1911.) Similar to Constance Oliver.

HOLDFAST BELLE. (Hemus, 1908.) Soft pink, tinged apricot.

HOLDFAST PINK. (Hemus, 1908.) Buff-pink self.

HYACINTH. (Gilbert, 1910.) Magenta self, small.

lolanthe. (Chapman-Mackereth, 1912.) White self.

lona. (Gilbert, 1910.) Bluish-purple self.

Iris. (Breadmore, 1911.) Rich salmon self.

IRISH BELLE OR DREAM. (Dickson-Burpee, 1912.) Rich lilac flushed pink. Awarded certificate of merit by the National Sweet Pea Society, 1911.

ISOBEL MALCOLM. (Malcolm, 1911.) Primrose self. .

IVANHOE. (Dobbie, 1910.) Lavender self.

IVY HERBERT. (Breadmore, 1909.) Rich plum self.

JACK TAR. (Breadmore, 1911.) Dark blue with bronze standard.

JACK UNWIN. (Unwin, 1909.) Rose flake, white ground. JARGOON. (Aldersey, 1910.) Heliotrope self.

JOHN RIDD. (Stark, 1912.) Large purple self.

JULIET. (Deal, 1912.) Pale apricot on lemon ground.

King Alfred. (Breadmore, 1912.) Bright orange-pink.

KING GEORGE. (Woodcock, 1910.) Lilac-rose self.

KING MANOEL. (Stark, 1912.) Maroon self.

Kowhai. (Trevethick-Mackereth, 1912.) Ivory shaded apricot.

LADY ARTHUR. (Aldersey, 1910.) Deep cerise and salmon pink.

LADY EVELYN EYRE. (Holmes-Sydenham, 1912.) Pale pink, flushed salmon.

LADY FLORENCE WILLOUGHBY. (Gilbert, 1911.) Buffpink self.

LADY KNOX. (Dobbie, 1912.) Blush-white.

LADY SARAH SPENCER. (Cole, 1910.) Pink suffused salmon.

LANCASHIRE. (Bolton, 1910.) Salmon-pink, cream ground. Similar to Miriam Beaver.

LAVENDER G. HERBERT. (Breadmore, 1909.) Lavender self.

LAVENDER PARADISE. (Hemus, 1910.) Lavender self.

LAVENDER QUEEN. (Faulkner, 1912.) Soft lilac.

LESLIE IMBER. (Unwin, 1912.) Rich blue self.

LIBERTY. (Lumley, 1910.) Crimson self.

LILAC QUEEN. (Bath, 1910.) Clear lilac self.

LILAC SPENCER. (Davies, 1911.) Lilac self.

LILAC SUNBONNET. (Aldersey, 1910.) Lilac and heliotrope.

LINDA HEMUS. (Hemus, 1911.) Silvery mid-blue self. LIZETTE LUMLEY. (Lumley, 1910.) Rose stripe on cream ground.

LORD CHARLES BERESFORD. (Alsen, 1910.) Rosymauve self.

LORD NORTHCLIFFE. (Stark, 1910.) Cerise self.

Louise Matilda. (Faulkner, 1912.) Large white self.

LOYALTY. (Stark, 1912.) Violet flake on white ground. MADGE RIDGARD. (Unwin, 1910.) White flushed

MADGE RIDGARD. (Unwin, 1910.) White flushed heliotrope.

MAGNIFICENT. (Stark, 1910.) Similar to Mrs. W. J. Unwin.

MAJESTIC. (Miller, 1912.) Large cream self.

MAORI BELLE. (Trevethick-Mackereth, 1911.) Lavender self.

MAORI CHIEF. (Trevethick-Mackereth, 1912.) Maroon self.

Marchioness of Tweeddale. (Bolton, 1911.) Similar to Martha Washington.

MARGARET MADISON. (Morse-Burpee, 1912.) Clear pale blue self. Certificate of merit, National Sweet Pea Society, 1911.

Marion. (Dobbie, 1911.) Pale lilac rose.

MARJORIE HEMUS. (Hemus, 1912.) White, picoteed blue.

MAROON PARADISE. (Hemus, 1908.) Deep maroon.

MARTHA WASHINGTON. (Henderson, 1910.) White edged and flushed rose.

MARY VIPAN. (Eckford, 1910.) Rose self.

MAUD HOLMES. (Holmes, 1910.) Crimson self. Similar to King Edward Spencer.

MAUVE PARADISE. (Hemus, 1910.) Light mauve self. MAUVE QUEEN. (Dobbie, 1912.) Bright mauve.

MAY CAMPBELL. (Dobbie, 1912.) Cream, flaked carmine.

MAY FARQUHAR. (Unwin, 1910.) Deep blue self. MELBA. (Malcolm-Dobbie, 1912.) Large pale salmon.

MERCIA. (Stark, 1910.) Pale salmon self.

MILLIE MASLIN SPENCER. (Holmes-Sydenham, 1912.)
Magenta-crimson self.

MINNIE FURNELL. (Alsen, 1912.) Pink with cream eye.

MINNIE ORST. (Deal, 1912.) Blue, veined white.

Miss Frills. (Gilbert, 1909.) Similar to Mrs. Sankey Spencer.

Miss L. E. King. (King, 1909.) White, flaked orange-pink.

MISTRESS LUMLEY. (Lumley, 1910.) Cream, flaked. Mollie Clegg. (Breadmore, 1910.) Lavender self.

MONEYMAKER. (Agate-Lumley, 1910.) White self.

MONITOR. (Bolton, 1910.) Rose flake.

Moonstone. (Aldersey, 1910.) Pale lavender-gray self.

Mother o' Pearl. (Aldersey-Sydenham, 1909.) Plumbago blue.

MRS. ALEX. WARE. (Bolton, 1910.) Cream, shaded apricot.

MRS. ALSEN. (Alsen, 1910.) Clear blue self.

- Mrs. A. Malcolm. (Malcolm-Mackereth, `1909.)
  Cream self.
- Mrs. Bryce. (Bolton, 1911.) White, edged buff.
- Mrs. Cuthbertson. (Dobbie, 1912.) Pink with white wings.
- Mrs. Duncan. (Stark, 1910.) Crimson-scarlet self.
- Mrs. E. Darlington. (Darlington, 1910.) Rose, cream ground.
- Mrs. E. J. JOHNSTONE. (Johnstone, 1910.) Salmon buff self.
- Mrs. E. Noakes. (Agate-Lumley, 1910.) Lavender self.
- Mrs. E. Otter. (Otter, 1910.) French gray, veined. Mrs. F. Wellesley. (Wellesley, 1910.) Cream, tinged blush.
- Mrs. George Charles. (Bolton, 1910.) Dark blue. Mrs. Gibbs Box. (Box, 1912.) Salmon-pink, cream ground.
- Mrs. Harriette Hemus. (Hemus, 1912.) Pale salmon.
- Mrs. H. CHIVERS. (Unwin, 1910.). Cream pink.
- MRS. H. D. TIGWELL. (Unwin, 1911.) Similar to Ethel Roosevelt.
- Mrs. Herbert Hemus. (Hemus, 1911.) Magenta.
- MRS. HESLINGTON. (Heslington-Dobbie, 1912.) Lavender shaded mauve.
- Mrs. H. Lowe. (Lowe, 1910.) Salmon rose.
- Mrs. James C. House. (House, 1912.) Mauve with purplish wings.
- Mrs. Lancaster. (Bolton, 1910.) Cream-pink self.
- Mrs. MILLER. (Miller, 1910.) Primrose self.
- MRS. R. HALLAM. (Unwin, 1911.) Soft salmon self.

MRS. TOWNSEND. (Jarman, 1910.) White, flushed and edged blue.

MRS. W. J. UNWIN. (Unwin, 1910.) Orange flake on white ground.

MRS. W. S. Birch. (Jones, 1911.) Mauve pink on cream ground.

Mrs. Walter Wright Spencer. (Routzahn, 1910.)
Mauve self.

Mrs. Warren. (Holmes-Sydenham, 1912.) Bright blue, veined.

MRS. WILCOX. (Gilbert, 1909.) Similar to America Spencer.

Mulberry. (Aldersey, 1912.) Mulberry-red self.

Mystery. (Aldersey, 1912.) Pale pink, flushed salmon.

NANCY. (Bolton, 1910.) Shrimp-pink self.

NETTIE JENKINS. (Unwin, 1911.) Light lavender self.

NUBIAN. (House, 1910.) Chocolate self.

OPAL. (Aldersey, 1910.) Pale lavender-blue.

ORANGE KING. (Bide, 1911.) Salmony-orange.

ORANGE PARADISE. (Hemus, 1911.) Orange self.

ORANGE PERFECTION. (Box, 1912.) Orange with rose wings.

ORANGE SEEDLING. (Hemus, 1911.) Orange self.

ORCHID. (Malcolm-Burpee, 1913.) Lovely shade of helio.

Orion. (Holmes-Sydenham, 1912.) Deep reddishcrimson.

OVERCOMER. (Alsen, 1910.) Pink self.

PEARL. (Aldersey, 1910.) Pure white.

PEARL-GRAY SPENCER. (Morse-Burpee, 1912.) Dovegray suffused light rose.

PEGGY. (Lumley, 1912.) Blush.

PICOTEE. (Watkins and Simpson, 1910.) Same as Dainty Spencer.

PLASHET BEAUTY. (Savage, 1910.) Pinkish mauve, lavender wings.

PREMIER. (Stark, 1910.) Crimson-scarlet self.

PRIDE OF COOMBE. (House, 1910.) White flaked rose.

Primrose Beauty. (Stark, 1912.) Primrose self.

PRIMROSE KING. (Jarman, 1910.) Primrose self.

Primrose Waved. (Eckford, 1908.) Same as Primrose Spencer.

Prince George. (Bolton, 1912.) Lilac-rose, reddish-violet wings.

Princess Juliana. (Breadmore, 1910.) Primrose self. Princess Mary. (King, 1912.) Ivory and buff.

Purple Prince. (Dickson-Burpee, 1911.) Standard purplish-maroon, wings rosy-purple.

QUEENIE. (Deal, 1909.) lvory, tinted blush.

QUEEN EIRA. (Jenkins-Parsons, 1912.) White. Black seeded.

QUEEN MARY. (King, 1910.) Pink on cream ground. QUEEN OF NORWAY. (Bolton, 1910.) Heliotropemauve self.

RAINBOW SPENCER. (Morse-Burpee, 1912.) lvory white, flaked rose.

RATA. (Trevethick-Mackereth, 1912.) Deep crimson self.

RED ADMIRAL. (Aldersey, 1910.) Crimson and rose. RED CHIEF. (Bolton, 1910.) Red Maroon.

RED STAR. (Malcolm-Dobbie, 1912.) Crimson-scar-let self.

RENA OLIVER. (Lumley, 1910.) Light pink self. R. F Felton. (Bolton, 1912.) Lavender self.

ROSABELLE. (Malcolm, 1912.) Distinct shade of rose.

Rose Diamond. (Aldersey, 1912.) Salmon-rose.

ROTOITI. (Trevethick-Mackereth, 1912.) Cream flushed pink.

ROYAL RED. (Aldersey, 1910.) Dark crimson self. ROYAL SCARLET. (Aldersey, 1910.) Scarlet self.

Ruby. (Aldersey, 1910.) Orange-scarlet, wings reddish rose.

RUBY. (Bolton, 1910.) Reddish magenta.

RUTH EARL. (Lumley, 1911.) Chocolate colored self. SCARLET EMPEROR. (Holmes-Sydenham, 1912.)

Bright scarlet self.

Scarlet Empress. (Holmes-Sydenham, 1912.) Scarlet self.

Scarlet Monarch. (Deal, 1910.) Crimson-scarlet self.

Scotch Pearl. (Aldersey, 1910.) Lavender, flushed pink.

SEAFOAM. (Cole, 1910.) White self.

SEAMEW. (Cautley, 1912.) Pale blue.

SEASHELL. (Aldersey, 1910.) Light lilac-rose, cream ground.

Shawondasee. (Hemus, 1910.) Similar to Flora Norton Spencer.

SILAS COLE. (Cole, 1909.) Dark maroon.

Snowflake. (Breadmore, 1910.) White self.

STIRLING STENT. (Agate, 1911.) Bright salmonorange.

SUFFRAGETTE. (House, 1910.) Lavender flake on white ground.

SUNPROOF KING ALFONSO. (Breadmore, 1910.) Similar to King Edward Spencer.

TARBOOSH. (Aldersey, 1910.) Red self.

TARBRUSH. (Aldersey, 1910.) Dark claret.

THE HON. DELIA SPENCER. (Cole, 1910.) Light magenta.

THE SQUIRE. (Faulkner, 1912.) Crimson-scarlet self. THE SULTAN. (Bide, 1910.) Maroon self.

THOMAS STEVENSON. (Holmes-Sydenham, 1911.) Rich orange-scarlet.

THORA. (Stark, 1910.) Pale pink with darker edges. Tom Bolton. (Bolton, 1910.) Dark maroon self. Topaz. (Aldersey, 1910.) Ivory self.

TORTOISESHELL. (Aldersey, 1910.) Shrimp-pink. TRUE BLUE. (Aldersey, 1912.) Indigo blue self.

VERMILION BRILLIANT. (Dickson-Burpee, 1912.)
Bright scarlet self. Awarded Philadelphia North
American Silver Cup for best novelty, 1911.

VERONIQUE. (Lumley, 1911.) Bluish-purple, veined. VIOLA RATCLIFFE. (Breadmore, 1910.) Rosy lavender self.

VIOLET CRABB. (Bide, 1911.) Reddish lavender.

Walter P. Wright. (Unwin, 1912.) Light lavender. Waterwitch. (Bunting, 1911.) Cream ground, picotee edge.

WAVED CREAM. (Malcolm-Mackereth, 1909.) Cream self.

WAVERLY SPENCER. (Morse, 1909.) Purplish maroon, wings rosy-purple.

WENVOE CASTLE. (Gerhold, 1910.) Rosy mauve. WHITE QUEEN. (Stark, 1912.) Large white self.

WHITE WAVED. (Eckford, 1908.) Similar to White Spencer.

WINIFRED DEAL. (Deal, 1910.) Similar to Dainty Spencer.

#### NEW SPENCER VARIETIES

Winifred Savage. (Savage, 1910.) · Purplish heliotrope.

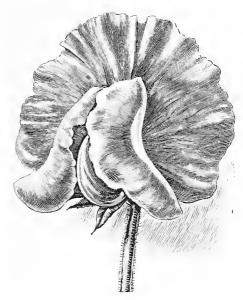
Winifred Unwin. (Unwin, 1912.) Pale lavender self.

WINSOME. (Deal, 1910.) Pink suffused heliotrope.

W. R. Beaver. (Bolton, 1910.) Claret stripe on gray ground. Similar to Senator Spencer.

ZARA. (Hemus, 1908.) Salmon-pink.

ZEBRA. (Hemus, 1910.) Rosy mauve flake, white ground.



"SPENCER" SWEET PEA,-IRISH BELLE OR "DREAM."

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### WINTER-BLOOMING SWEET PEAS

To succeed in this, a heated greenhouse is indispensable, and the seeds may be sown on raised benches, in pots, or the solid bed or border. The date of sowing will depend on when the Sweet Peas are wanted to bloom. The forcing or winter-flowering varieties take from two and one-half to three months from date of planting until blooming, if started about the middle of August. Later sowings take rather longer: therefore, if required for spring cutting seed should be planted early in November. The seed may be planted in the row, or started in small pots or flats (many growers prefer flats).

Best results are obtained when grown in solid beds, though we have seen magnificent Peas cut from plants on raised benches. They come into flower earlier when grown on raised benches, but the quality of bloom is not so fine, nor is the flowering season so prolonged as when grown in solid beds. It pays to prepare a special compost for Sweet Peas, which should be composed of three parts good fibrous loam, not too heavy, and one part well-rotted manure (cow or sheep manure for preference), to which add a good dressing of bone meal

The rows should, where possible, be five feet apart, certainly not less than four feet, and they must have head room of not less than six feet—ten to twelve feet being better. Take out the soil to the depth of 18 inches and 12 inches wide. Stir up the sub-soil and fill up with the prepared compost, or, if the existing soil is fairly good, manure and bone meal might be added to it instead of the prepared compost, but the

additional size of flower and length of stem obtained by the thorough preparation of the soil more than repays the initial cost of material and extra work entailed.

One ounce of seed will sow about 30 feet of row, planted very thinly. When the seedlings are from three to four inches high, thin out to four inches apart. Water carefully and sparingly until the plants are well up and growing strongly. During the early stages of growth the temperature must be kept fairly low—say 42 to 48 degrees at night, with a rise of 10 degrees during the day.

Spray the plants occasionally when the weather is clear and bright, but do so early in the day that the foliage may be dry by night. A humid atmosphere must be avoided, also cold drafts, as this will start mildew. Fumigate every seven or ten days to keep the vines free from green fly as their ravages very soon cripple the plants.

The plants must be given supports immediately they are from three to four inches high, as a lack of something to cling to at this stage acts as a decided check to their growth. The soil should always be kept loose round the plants.

As the flower buds begin to swell a gradual rise of temperature may be given, and when the plants are in full flower it should average from 48 to 52 degrees at night, rising to 60 or 65 during the day.

At this stage it will add to the size of flowers and length of flower stems if a top dressing of well-rotted cow or sheep manure be given (which might later be supplemented with applications of liquid manures once a week). Apply it after stirring the soil, and the

subsequent waterings will carry the strength of it down to the roots. See that ventilation is given whenever possible, as a close, humid atmosphere encourages bud dropping. The absence of lime from the soil is also conducive to bud dropping, therefore the soil should be tested previous to planting. To do so pour a little Spirits of Salt upon the soil, when if lime is present in sufficient quantity it will cause a fizzing to follow; if it does not do so the soil is deficient of this necessary earth constituent and a dressing of air-slaked lime should be applied while trenching the ground.

Among the most suitable varieties for winter forcing must be included:

Burpee's Earliest Sunbeams. Primrose. Burpee's Earliest White. (Similar to Watchung.) Burpee's Reselected Earliest of All. (Similar

Christmas Pink.)

CHRISTMAS STELLA MORSE. Pinkish-apricot.

LE MARQUIS. (Christmas Navy Blue.)

MONT BLANC. White. (Similar to Florence Denzer.)

Mrs. Alex. Wallace. Rosy lavender.

MRS. C. H. TOTTY. Pure lavender.

MRS. E. WILDE. Bright rose.

Mrs. F. J. Dolansky. Bright pink.

Mrs. Wm. Sim. Salmon-pink.

To follow the winter-flowering type we recommend planting the Spencers or grandifloras towards the end of December or early January, and these should begin flowering in April and continue until the fall and spring planted outdoor crops begin to bloom.

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