

## Horticultural Department

By Prof. J. L. Stahl, Horticulturist, Western Wash. Exp. Sta., Puyallup, Wn.  
For Any Information Regarding This Department, Address the Above.

### Propagating of Small Fruits

Strawberries New plants of the strawberry are secured from runners or propagating shoots of the parent plant. A single plant will produce several runners and from three to five new plants on each runner. When a new bed is started the runner plants need the parent plants only, should be used, as they are more vigorous than plants taken from near the tip of the runner.

Raspberries—New plants of the blackcap raspberry are secured by covering the tips of shoots (young canes) with dirt during late summer. Roots will form on these covered tips which can be transplanted the following spring, as a new plant.

Loganberries are usually propagated by the same method.

Red raspberries do not propagate from tips of the canes, but send out suckers or underground stems from the roots. New roots are formed on these suckers, a cane or stalk is produced during the summer, and the young plant may be reset either late the same fall or the following spring. An old plant may often be induced

to form many new ones from its roots by cutting the roots with a spade or by plowing close to the crown of the plant.

Blackberries—Produce new plants from the roots like the red raspberry.

Currants and gooseberries—These plants are usually propagated either by mound layerage or by cuttings made from the young shoots. Mound layerage is perhaps the simplest of the two methods. Soil is mounded over the crown of each plant, covering the base of each young cane. As soon as the roots have formed the cane may be severed from the parent plant and the newly formed plant reset. Mounding is best done in the summer after the crop has been harvested.

When a great many new plants are desired, cuttings can be made from the newly formed wood. In favorable localities, cuttings can be made just after pruning, in early spring, and the clippings of the young wood set in trenches in the soil. A piece of wood about the length and diameter of a lead pencil makes a very convenient cutting for handling. Before planting, the soil should be thoroughly prepared to a depth of ten inches. Cuttings are easily set by opening a crack in the soil with a spade, inserting the cutting with buds pointing upward, replacing the spade a few inches from the cutting, and by pressing forward on the handle of the spade, force the soil firmly around the cutting. It is usually preferable to set cuttings of gooseberry and currants deep enough to allow about two buds below the surface of the soil and two above. This will generally insure rooting and a vigorous top.

In some localities where it is difficult to start hardwood cuttings directly in the field, they may be started in a cold frame and transferred to the field as soon as they are well calloused. When handling in this way the cuttings are tied in bunches, inverted in moist sand with buds pointing downward, and covered by an inch or two of sand. This may be done any time during the fall after the wood has become well ripened. The object of inverting the cuttings is to keep the buds dormant while heat is applied to the base or butt end of the cutting. A few weeks before planting time in the spring a layer of decomposing horse manure should be spread over the sand in which the cuttings are imbedded. This will heat the butt end of the cuttings and induce callousing and formation of root growth. Additional heat may be added by using a glass sash over the decomposing manure. Care should be taken to keep the sand moist around the cuttings at all times. As soon as the callous and swelling which usually precedes the root growth has started, the cuttings may be transferred to a carefully prepared nursery bed, or a carefully prepared nursery bed, and planted, just as cuttings set directly into the field. After the first season's growth in the nursery row the plants should be transferred to their permanent place

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and headed back severely to induce new shoots from the base of each cane and crown of the plant.

### PRUNING CURRANTS AND GOOSEBERRIES.

Currants and gooseberries should be trained and pruned to the bush form rather than to the tree form. On these plants the fruit buds are produced on the older wood. The number of crops the canes should be allowed to produce before renewing will depend a great deal on the vigor of the plant. Usually a cane will produce three to four crops before it is necessary to remove it. If a few new canes are allowed to mature each season, the old canes can be gradually removed as the new ones come into bearing. The number of canes to allow each plant will depend upon the soil and the distance of setting. Plants set five or six feet apart each way can usually support from four to six strong canes. Each year the new

growth should be headed back about half of its length. This will produce a short stout cane, strong fruit buds, and well developed fruit. In localities where the wood growth is extremely long, as it is in Western Washington, it is good practice to drive a stout stake near each currant bush, and when the fruits are about half grown, tie the canes to the stake with a strong cord. This will often save a heavily fruited cane from breaking.

### THE FEIJOA IN CALIFORNIA.

I have recently had some correspondence relative to a trial of the feijoa, a semi-tropical fruit of which southern California predicts wonderful things, and hope that it can be grown in the Puget Sound region if it is as valuable as the Californians say it is. Following is an article taken from the Monrovia Daily News, of Monrovia, Cal.:

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**Horticulture**

have recently been introduced to the fertile soil and amiable climate of southern California is one which in many ways stands alone. It is green when ripe, with an aroma of lilac and crataegle, flavor best described by thinking of bananas, pineapples and strawberries. The seed costs \$2500 a pound, and is difficult to procure at that price. It was introduced to the civilized world by a French traveler named Andre, who brought it from far away Uruguay. Its name is feijoa, which the botanists pronounce fayzoa, and the natives of Uruguay fayboa.

Monsieur Andre carried his feijoa back to France in 1800, and there succeeded in propagating it. The French people who were fortunate enough to know it esteemed it for its delightful bouquet as for its food value, and kept the fruit in their asiums as much as in their dining rooms.

Almost 15 years later Dr. Franchesch, of Santa Barbara, and a Mr. Hahne, of Los Angeles, brought specimens of the feijoa to southern California. Each claim the honor of having presented the fruit to the American people. Since that time, through direct importation from Uruguay and through propagating from the parent stock of Dr. Franchesch and Mr. Hahne the feijoa has become more widely known and has many friends among the nurserymen of the state, although it is still in the novelty class.

**POSSIBILITIES OF THE FEIJOA.**

According to Mr. Dan Glower of the Semi-Tropic Nursery, the feijoa will not remain among the novelties for any great length of time, but is destined to become one of the most popular sugar fruits on the market. Mr. Glower has been studying the fruit and experimenting with it for the past five years and has through the agency of the American consul at Uruguay, succeeded in obtaining a quantity of seed from that country. He has secured plants from varieties already introduced into this country and has in all about 300 specimens. He makes the following statement of its qualities:

"The feijoa is the climax, the highest type, of the guava family and is called the pineapple guava, as the pineapple flavor seems to predominate in the ripe fruit. The tree is shrub-like in form, will thrive in any soil and will grow without irrigation, although it does much better when well watered. The leaves are of the constant foliage type, approaching evergreen: are olive green on top and silver gray beneath. It flowers ordinarily from the middle of April to the middle of May. The blossoms are red and white, the calyx green outside and red inside, corolla white outside and red within, stamen and filaments red with yellow anthers. The pistil is red.

"The fruit is green in color, even when ripe; is oval or pear shaped and does not mature on the tree, but must be picked and allowed to ripen indoors, requiring from ten to fourteen days after picking to reach the most perfect condition. It matures the latter part of October, and in keeping qualities is about on a par with the apple. In size it is from



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L. H. WILLOUGHBY,  
CHAMBERLAIN, N. D. April 20th, 1913.

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W. D. GANO  
DANES, N. D. May 26th, 1913

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GEO. BROOKER  
COSWELL, N. D. May 24th, 1913

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WM. O. REEDER  
WILLOW CITY, N. D. June 26th, 1913

Customer—  
I received first class for \$110 balance due you. All fine and truly lumber. Better than I expected. I am very pleased.  
Will write more when I get time.  
NELSON SMITH  
IMPERIAL, WEBB, August 25th, 1913

two to three inches long, and is half as large in diameter as in length. It is a good shipper, being protected by a tough skin. The fruit is practically seedless, the seeds being no larger than mustard seeds and from eight to twelve to the fruit. In flavor it is a combination of banana, pineapple and strawberry. Is excellent eaten raw, sliced and served with sugar as a dessert or made into jam or jellies.

"The tree is hardy, has been grown as far north as Oregon and as far east as Colorado, where it successfully withstood a temperature of four degrees. It is free from scale or spider and is long lived."

**BERRY GROWERS DISCUSS MARKETS.**

The meeting called at Puyallup last Saturday afternoon to protest against some phases of the management of the Puyallup & Summer Berry Growers' Association resulted in bringing together about 700 berry growers.

These filled the Redman's hall from stage to the street as full as it would

possibly hold. It was believed at first that the meeting was called as a protest against the management of President Paulhaus, but it developed that it was less a protest against the management than a frank discussion of ways and means to better the berry industry of the Puyallup valley.

Mr. John Mills made the opening address in which he stated the object of the meeting and told how the meeting had been brought about. Mr. Fred Chamberlain made the principal address of the protestants in which he reviewed at some length the troubles of the berry growers of the valley and thought that the low price of the fruit this year was due to bad management in selling. He made a strong plea for co-operation between producer and consumer and approved of the plan which would cut the middleman's profit.

After Mr. Chamberlain's address Mr. Paulhaus took the platform and for three-quarters of an hour gave a history of the berry association of which he has had the management for several years. He told of

the great growth the association had made; the efforts made and success obtained in enlarging markets; of the great growth of the canning industry, and spoke at some length of the efforts made to supply patrons of the association with necessary fertilizer, groceries and feed in the establishment of a store.

At the conclusion of his talk which was without anger and in a most explicit manner, he asked if the gathering would endorse his administration and if they desired his re-election as manager? On the affirmative practically every grower in the room voted aye. Only a few negative votes were recorded. There is no doubt that the meeting will have a good effect on the berry industry of the Puyallup valley as there is a better understanding of the association's management with its members.

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