

LEGUMES THAT COME BEFORE OTHER CROPS INCREASE THOSE OTHER CROPS ELEVEN TO 33 PER CENT

# Farming and Industrial Magazine Section

## The Oregon Statesman

IN POLK AND MARION COUNTIES THIS FINDING MADE FROM TESTS BY STATE AND FEDERAL WORKERS

WAY BETTER THAN LAST YEAR

SEVENTY-EIGHTH YEAR

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### PLANT WIZARDS' WORK WITH CORN

A Branching Variety of Sweet Corn Promises Much in This Field

Sweet corn is a typically American vegetable, one of the greatest delicacies of the garden. Corn breeders have worked for years to develop field corn, the great farm crop, while the table delicacy, sweet corn, stood still and new varieties came slowly. It is a different story now, and now sweet corns are offered each year.

A new branching variety introduced this year seems to be what scientists would call a mutant, the unexplained appearance of a new type, which may greatly increase the yield of the average corn plantation. On the new type of breeders have worked for years to a plant and some times as high as six, while the older types do not average as much as two good ears to a stalk.

This corn appeared in the garden of F. C. Kevitt of Athenia, N. J., several years ago. The seed was saved and planted and the trait of branching at the ground into several stalks, each of which bore ears of corn, reproduced itself. It required several years to "true" the stock so it would reproduce the type from seed. The plants are said to average 6 1/2 feet tall, the ears to average 7 inches in length and the quality is said to be of the best.

Golden bantam introduced a new era in sweet corn and it has been the most popular home garden and table corn ever grown. It has been the subject of experiment among plant breeders for years and there are a number of hybrids with older and larger types, the object being to take the sugary sweetness of Golden Bantam into a larger ear.

The work of plant breeders has taken a different tack recently with Golden Bantam and that is to isolate earlier and better strains. The earliest strains have been varieties of white and black corn, the squaw corn as it was formerly known. The early strains of yellow corn did not come so easily but they have now been secured in Golden Bantam.

As corn has been hybridizing through the processes of nature for many years, plant breeders find it necessary to inbreed or self-fertilize over a period of from five to seven years to unscramble the family relationships and traits. This has been done until at last an early strain of Golden Bantam maturing eleven days earlier than the earliest known strains and three weeks earlier than the latest strains has been isolated.

Corn breeding involves a rather difficult task, as the quantity of pollen shed by the tassels makes it necessary to cover both tassel and silk completely to prevent stray pollen falling upon the silks.

### ASTERS ARE THE QUEENS OF THE FALL ANNUALS; A WIDE VARIETY

Asters are the queens of the fall annuals, the greatest material of their season both for cutting and garden decoration. There is such a wide variety in this useful plant that it is sometimes difficult to make a selection. The

Chief of these is what is known as the yellows, the blooms never developing their true colors, but remaining a greenish yellow, deformed wad.

This trouble, it is now known, is carried by certain insects. Root



two general types, the branching and the ostrich plume, are the most desirable for the main crop of asters. The late-branching types give a great crop of flowers with good stems showing an inclination to an incurved shape. The ostrich plume section, which includes the Crego, has curled and twisted petals inclined more to out-curving, following, in a general way, the tendency in chrysanthemums, of which they have become rivals in size and beauty.

The Giant of California and American Beauty type are noted for the size of the flowers and the length of the stems which they offer for cutting. Those with late-branching types are especially valuable. Asters need rich soil, a liberal supply of moisture and good cultivation. But even with these conditions, they have developed several plagues that have discouraged many gardeners.

as it is the contact of pollen and silk that causes a kernel to form on the cob, each strand of the silk representing a kernel.

Paper bags were used to protect the plants employed in the breeding experiment and the silks were fertilized by hand from the pollen of the same plant, the seed ripened and planted and the process continued until strains that would breed true from seed were established.

Corn feasts were celebrated events among the Indians in the early history of the country, and particularly in the history of the Mandan Indians of North Dakota.

The French explorer, M. de la Verendrye, in 1838 describes a corn feast by these Indians given in his honor when he visited the tribe.

aphis give more trouble. A dressing of hardwood ashes when the asters are set out has proved one of the best means of starting them on their way to a healthy career. Asters may be sown either indoors, in frames, or in the open ground, all depending on the earliness of bloom desired. This is also regulated by whatever the seed planted is of an early flowering or late flowering type. This is a matter of selection from catalogues.

New anemone flowered and single types have gained great popularity during the last few seasons, the Sunshine asters being the finest example of the anemone flowered type and unusually beautiful and graceful in soft colorings with different colored centers.

Any of the new large-flowered single strains are good. This type is one of the most artistic for cutting.

### WE SHOULD GROW ALL OF OUR SUGAR

The United States Is Now Wisely Sending Scientists to New Guinea

(Under date of April 4, the press service of the United States department of agriculture, under the heading, "Sugar Cane Specialists Will Explore New Guinea for Disease-Resistant Varieties," sent out the following:)

Having come to the conclusion that New Guinea is the native home of sugar cane, the United

States department of agriculture has organized an expedition under the leadership of Dr. E. W. Brandes, sugar plant specialist, which will use an airplane in searching the unexplored wilds of the island for disease-resistant cane varieties that may prove valuable to the industry in Louisiana and other parts of the south.

Doctor Brandes was scheduled to sail from San Francisco April 12, accompanied by Dr. Jakob Jesweit, who was formerly chief of sugar plant breeding work in Java and now of the University of Wageningen, Holland; and Richard K. Peck, who will pilot the plane. Peck acted as pilot for the Stirling expedition to Dutch New Guinea under the Smithsonian Institution in 1926-27. These men will be joined at Honolulu by S. E. Pemberton, entomologist of the Hawaiian Sugar Plant association experiment station, and proceed to Port Moresby, the base of the expedition on the southeast coast of New Guinea.

The plane, a Fairchild cabin type, will be furnished by B. G. Dahlberg, president of the Celotex company, makers of synthetic lumber from sugar cane bagasse, who is also interested in sugar cane plantations in Florida and Louisiana. Equipped with pontoons for landing on rivers, lakes or other bodies of water, the plane will make possible the exploration of the interior portions of the island otherwise inaccessible or difficult to reach. The study is expected to take from six to eight months. The Australian government is co-operating to make the expedition possible and successful.

While the idea of such an expedition has been under consideration for the past six years or more, it has not been possible to bring it about until recently. Depression in the sugar cane industry of Louisiana and other parts of the south resulting largely from the declining yields caused by mosaic and root diseases, has given impetus to the project.

**The P. O. J. Cane**  
The most feasible method of improving the production of sugar cane in the south is by the use of varieties that are resistant or tolerant of these diseases. Some favorable results have already been accomplished by the introduction of several improved varieties developed at the Proefstation Oost Java, the experiment station maintained by private planter in Java. These varieties have given such satisfactory performance in tests during the past six years that specialists have been encouraged in the work. More than 170,000 acres were planted in Louisiana last fall with varieties recently introduced from Java.

"We believe," said Doctor Brandes, "that the best solution of the problem depends on sticking to the search for tolerant varieties until even better ones are developed."

"In New Guinea, where we believe sugar cane is indigenous, we know that varieties arise by cross-

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### KEEPING UP THE SUPPLY OF GREENS

They Are Good for What Ails You, and They Are Good in Every Way

"Greens" furnished an old-fashioned dish because they were good for what ailed you whether you liked them or not along with the old-fashioned spring tonics, sulphur and molasses and other hygienic horrors of a bygone age. Their health-giving value is now recognized, but on a sounder scientific basis, and they are popular because it is not a duty to eat them as it was formerly. There is opportunity to appreciate their flavor without prejudice on the ground of medicinal diet.

Spinach, the earliest of all greens, is a brief crop in the home garden. Other greens are needed to take its place. The standby is the beet, both the root types and the swiss chard, which doesn't form a large root but runs heavily to foliage and produces greens all summer. To some the chard is a rather insipid vegetable. For these mustard greens are a real old-fashioned, when it was customary to cut down the mustard crop of weeds in the fields and gardens by pulling the young plants for greens. The garden varieties are so superior as hardly to be recognized in the same class with the weeds, although the latter has excellent flavor when cooked.

The garden mustards are used both as salads, green, and as cooked greens. There are two types, the large leaved useful for cooking and the small leaved useful for salads. The Chinese and Southern Giant are large-leaved sorts excellent for cooking and giving liberal crops of leaves. The White London is a small, smooth-leaved sort which grows quickly and gives pungency to salads. The Fordhook Fancy has become the most desirable of the salad types because of its curled and fringed leaves, being as ornamental as parsley and attractive for garnishing as well as for salads.

The mustards will grow in any ordinary good garden soil. A packet will furnish an ample supply. It is best to plant a short row of each type, one for salads and one for greens. Thin the plants to three inches to give them a chance to develop. The fancy curled should have six inches to reach their best development. Mustards are seldom grown in the home garden, but they are well worth a try, and once tried, they are likely to become fixtures.

Some of the miniature tomatoes will prove popular with the children as well as being fine for preserves. Red plum, red cherry, red currant and their yellow varieties are all good.

### A LADINO CLOVER BOOM IS STARTING IN THIS DISTRICT