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COWPEA (*Vigna sinensis*).

The cowpea is a strong-growing annual legume, varying in form and habit of growth with the variety, soil, moisture, and cultural conditions. It has long been recognized as a valuable crop for the Southern States, where it has been extensively grown for forage and green manuring. Although the cowpea is especially adapted to southern conditions, the introduction of earlier varieties has extended its cultivation northward. The cowpea will thrive under rather unfavorable conditions of soil and preparation, except where the land is wet and cold. When well inoculated, the plant draws heavily upon the nitrogen supply of the air. It is an excellent green-manure crop, greatly increasing the supply of humus and nitrogen in the soil. The feeding value of the hay has long been recognized, as it has been used extensively for all kinds of stock in the cowpea region. Cowpeas for hay production are very advantageously grown in mixtures with sorghum, Johnson grass, Sudan grass, or soy beans. Very good results are obtained by growing cowpeas with sorghum or corn in cultivated rows for grazing or for ensilage. They are most profitably grown in rotations with other crops. In the Southern States the cowpea is quite generally and favorably known as a table food.

Seeding.—Seeding should be done when the soil is warm and not too wet, as the seed will then germinate very readily. The land should be well prepared before seeding, to obtain the best results. Cowpeas may be sown either in drills or broadcasted, depending upon the purpose for which the crop is grown. For the production of seed, they should be sown in rows 24 to 36 inches apart, requiring about 30 pounds of seed to the acre. For hay or green manuring, the best method is to broadcast with a grain drill, using from 60 to 90 pounds to the acre. Thin planting should be the practice in regions of light rainfall, and comparatively thick planting where there is ample moisture.

Seed.—Seed for planting should be fresh and of good quality, although cowpea seed retains its vitality much longer than that of the soy bean. Cowpea seed is subject to attack from the pea weevil. By treating the stored peas with carbon bisulphid this insect can be held in check.

Varieties.—Although there are a large number of varieties of cowpeas known, there are comparatively few varieties of prime importance. Often a variety quite extensively cultivated is found under different names in various sections of the country. The varieties of cowpeas are distinguished most readily by the color and size of the seed, though they differ in habit, earliness, prolificness, and disease resistance. For forage purposes the most desirable varieties are those having a fairly upright habit, large growth, and which hold their leaves well and produce an abundance of pods. For table use the varieties with white or nearly white seeds are preferred. Following are brief notes regarding the more important varieties.

Whippoorwill.—This is a good general-purpose variety and the one most commonly grown. It is medium maturing, vigorous, fairly erect, and is suitable for grain or hay production or for both. The seed is mottled chocolate on a buff or reddish ground color. It is also known under the names of Speckled Bunch, Speckled, and Shinney.

New Era.—This is one of the most erect of the commercial cowpeas. It is about two weeks earlier than the Whippoorwill. It usually produces a heavier yield of seed than the Whippoorwill, but less vine growth. The seed is small and bluish in color, owing to the many minute specks on a gray ground.

Groit.—This variety is very similar to the New Era and is often confused with that variety. It is a hybrid between the New Era and Whippoorwill. The Groit is rather superior to the New Era, as it makes a larger growth and fruits more heavily. An important factor is the persistence of the leaves on the Groit when the pods are mature. The seed is quite similar to that of the New Era, but it has chocolate markings in addition to the blue specks.

Brabham.—A hybrid between the Whippoorwill and Iron varieties. It is quite similar in growth to the Whippoorwill, but is later, a trifle more viny, and holds its leaves better on ripening. It is especially adapted to the sandy lands of South Carolina, Georgia, and Florida, the semiarid lands of the Texas Panhandle, and to the sections where wilt and nematodes are prevalent, being highly resistant to both. The seed is smaller, but has the same markings as the Whippoorwill.

Iron.—A medium late maturing variety, fairly erect, with medium vine and quite prolific. It is highly resistant to wilt and nematodes, and is therefore adapted to the same regions as the Brabham, although it is a valuable variety under nearly all conditions. The buff or clay-colored seed is hard and retains its vitality better than most varieties.

Early Buff.—This is a new variety, especially adapted to northern conditions and should prove to be very valuable. It has an erect, bushy habit and is very prolific. The first pods mature in about 65 days. The seeds are buff, or pinkish buff, and oblong.

Clay.—This name is commercially applied to a group of varieties with buff seeds. Those varieties of medium and medium-late maturity (requiring 80 to 90 days to mature the first pods) generally make up what is known as the Clay, while the late varieties (requiring about 115 days to mature the first pods) are known for the most part as Unknown or Wonderful. The Clay group is adapted more particularly to green manuring or to producing a hay crop.

Black.—Although the name Black is generally applied to any black-seeded noncowder variety, black cowpeas belong mainly to two varieties—Early Black, or Congo, and Black. The Early Black differs from the Black in being 10 days earlier and in having larger seeds. Both varieties are low growing and viny, but are suitable for growing in corn and for pasture. On sandy soils the plants are more bushy in habit and produce a fair amount of seed.

Taylor.—The Taylor is the largest seeded of all American cowpeas. The seeds are buff, thickly speckled with blue, the blue specks arranged in groups. It is at best a second-rate variety, as the plant is low in habit, rather viny, and the pods are held low, so that the harvesting is difficult. It has met with favor, however, in sections of Maryland, Delaware, Tennessee, and Kentucky. The variety is known in various parts of the country as Gray Crowder, Gray Goose, Blue Jersey, Whittle, and Speckled Java.

Red Ripper.—Most American cowpeas with maroon kidney-shaped seeds are known as Red Ripper. Several closely similar varieties come under this name and it is best considered as a group name. The varieties of this group have much the same habit, differing mainly in earliness and seed characters. The plants make a large growth and are grown to a considerable extent in corn.

Blackeye.—So many varieties of cowpeas have black eyes that the name is really a group name. The plants are of medium-stocky growth, medium maturity, and produce a good yield of seed. The Blackeye pea is most commonly used for table purposes in the Southern States.

Suggestions.—While cowpea culture has greatly increased in late years, this has brought about a large increase in the price of seed. Until seed becomes more plentiful than at present, the more extensive use of the crop will be seriously retarded. Cowpea seed can be produced most abundantly on sandy or sandy-loam soils of moderate fertility. Communities having such soil conditions would do well to produce seed on a large scale, availing themselves of all the best machinery for handling the crop. This would mean mowers with bunching or side delivery attachments and the most approved thrasher for getting out the seed. This would be a profitable line of farming. In the present status of the cowpea industry, communities are likely to be growing a single variety, which may not be the best one. The production of seed on a large scale in certain areas would soon do away with the large number of local varieties and would thus greatly help the industry.

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