THE DARROW BLACKBERRY AND CLYDE PURPLE RASPBERRY

By George L. Slate and John Watson

The production of blackberries in New York State has declined from over 2,000 acres in 1900 to practically none at the present time. In the other northeastern states a similar decline in acreage has occurred. There are very few blackberry plantings in this area now.

The reasons for the disappearance of this good fruit are several. For many years it has been very difficult to get plants of good varieties true to name. Plants of a sterile blackberry that bloomed but produced no fruit have been widely distributed under various names. The tarnished plant bug, a native insect, feeds on the flowers and injures them so that the berries fail to develop normally. In some years the Experiment Station blackberry plantings produced very little usable fruit. The plant bug as a cause of trouble in blackberry growing is no longer important, as it is now easily controlled with DDT.

The blackberry breeding project at Geneva was started to produce better varieties to replace the unsatisfactory varieties that were being distributed. Hedrick and Bailey were introduced in 1950. Darrow, introduced in 1958, is superior to both of these varieties and should replace them.

Blackberry breeding is continuing and many more recent selections and first test seedlings are being evaluated for possible introduction as varieties.

DARROW

The Darrow blackberry originated from a cross made in 1940 between two Eldorado x Brewer seedlings, N.Y. 15826 and Hedrick. From this cross 364 seedlings were raised, and 15 selections were made in 1946, of which Darrow was one. It was first distributed by the New

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York State Fruit Testing Cooperative Association, Inc., Geneva, N. Y. in the fall of 1956 as N.Y. 24338. In 1958 it was named and introduced at the annual meeting of the Association. The name Darrow was applied to honor Dr. George M. Darrow, for many years in charge of the small fruit work of the United States Department of Agriculture's Plant Industry Station at Beltsville, Maryland. Dr. Darrow has had a life-long interest in blackberries.

Darrow has been an outstanding blackberry ever since it came into bearing in 1950 as a selection. Each year it has been the best variety or selection in the Station plantings. Reports from the latitude of Washington, D. C. indicate that it will be a useful variety at least that far south. It merits trial for both home garden and commercial planting where the winters are not more severe than at Geneva, N. Y. If it performs as well elsewhere as at Geneva, it should replace all other eastern blackberry varieties.

The berries are large, 1 inch long by ¾ inch wide, firmer than most varieties and good in quality. Darrow begins ripening early, or about
with Eldorado, and continues over a long period. Secondary fruiting laterals produce a few berries in late August and September.

The plants are unusually vigorous, tall and erect, surpassing other varieties and selections in the same planting. Crops have been consistently heavier than those of other blackberries under test. Following the winter of 1956-57 when the plants of other varieties were killed to the ground, Darrow produced a light crop, although the plants were injured by the low temperatures. The berries are not hidden in the foliage as with some blackberries, and picking is not difficult or unpleasant, if the rows are not over a foot in width.

Resistance to orange rust is not known, but in a properly managed planting this disease is usually not serious.

The canes have fewer prickles than Bailey and Eldorado, and about the same number as Hedrick. The canes are furrowed, whereas Eldorado canes are nearly cylindrical, especially near the tips.

Plants erect, hardy, productive, propagating by suckers and root-cuttings; primocanes many, very tall, stout, angular at base, slightly furrowed at tips, green, flecked and tinged reddish, slightly glossy, nearly glabrous, glandular tips; branches many; prickles many, long, stout, strong, straight, tinged reddish; leaves pinnate; leaflets 5, medium size, ovate to roundish ovate, rugose, medium green, medium thick, apex acuminate; upper surface pubescent, dull; lower surface greenish, mid-rib prickly, pubescence sparse, margin not lobed, serrate, uneven, in double series; petiole medium length, stout, prickly, nearly glabrous; floricanes green, not glaucous with few slender, strong, reddish prickles; leaflets 3-5, ovate.

Flowers 8-12 in a dense, leafy cluster; pedicels long, slender, prickly, recurved, pubescent; calyx pubescent, not prickly, eglandular; sepals 5, slender, acute.

Fruit large, 80 berries in pint, uniform, maintaining size throughout the season, long, slightly conic, slightly irregular, glossy black; drupelets many, medium size, juicy, firm: core soft, flavor mildly sub-acid, tart before fully ripe, good quality: season early and long.

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**Family Tree of Darrow Blackberry**

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Purple Raspberries

Purple raspberries, which are hybrids between the black and red raspberry, have long been grown commercially in central and western New York. They are suitable for canning and the manufacture of jam. Their vigor, productiveness and culinary usefulness make them also a choice home garden fruit.

The Experiment Station has previously introduced five purple raspberry varieties; Brant and Webster in 1926, Sodus in 1935, and Marion in 1937. Brant failed to become established as a variety, probably owing to the prevalence of virus diseases. Webster may have been virus-tolerant and was grown commercially on a small scale for some years. Sodus and Marion became standard varieties generally replacing Columbian, a virus-tolerant, virus-infected variety that was standard for many years.

Clyde, the most recent Station variety, appears to be superior to Sodus and Marion, especially in vigor and productiveness. It should be tested as a possible replacement for these varieties.

CLYDE

The Clyde purple raspberry resulted from a cross between the Bristol black raspberry and N.Y. 17861 (Newburgh x Indian Summer) red raspberry. This cross, which was made in 1946, produced 1145 seedlings from which 25 selections were made in 1949. It was considered a good cross with many better than average seedlings. The New York State Fruit Testing Cooperative Association introduced Clyde in the fall of 1961, but a few plants were distributed a year earlier as N.Y. 245.

The berries of Clyde are large, darker than medium purple, firm, cohering well and are somewhat tart in flavor. The tartness is desirable for canning and jam.

The plants are very vigorous and have been uniformly vigorous during the years that this variety has been grown at Geneva. The unusual vigor results in the growth of numerous large canes which produce more fruit than the fewer canes of less vigorous varieties. The canes tend to bend over with the weight of the crop, so that support may be desirable.

The canes resemble black raspberry canes, but are stouter. If the canes are compared with those of the Sodus purple raspberry the bloom on the Sodus canes is heavier and more persistent than on Clyde. The prickles of Clyde are purplish, whereas those of Sodus are greenish with
brown tips. The prickles of Clyde are slightly more recurved than those of Sodus.

Very little anthracnose has been noted on Clyde, even when it has been severe on black raspberries. The plants have experienced very little winter injury.

Clyde is the best purple raspberry now growing at Geneva and it is promising enough for extensive trial for commercial planting. It is

CLYDE PURPLE RASPBERRY

also well worth planting for home use, especially for culinary purposes.

Plants erect, hardy, productive, propagating by tip-layering; primocanes many, tall, stout, green, dull with heavy bloom, glabrous; tips eglandular with a slightly reddish tinge; branches many; prickles medium in number, length and thickness, strong, slightly recurved, purplish. Leaves palmate; leaflets 3–5, usually 3, large, long-ovate, terminal leaflet often cordate, rugose, medium green, medium thick, apex acuminate; upper surface glabrous, slightly glossy; lower surface whitish, densely pubescent, mid-rib prickly; margin serrate, in double series; petiole long, stout, prickly, nearly glabrous. Floricanes green,
glaucous with few short, stout, strong, purplish prickles; leaflets 3, ovate, terminal leaflet often cordate.

Flowers white; pedicels medium thick, prickly, slightly recurved, glabrous; calyx slightly pubescent, not prickly, eglandular.

Fruit large, 67 berries in pint, uniform, maintaining size well through the season, regular, roundish conic, a few are conic, dark purple, slightly glossy; cavity medium size, smooth; drupelets many, small, strongly coherent, juicy, firm: flavor tart, pleasant, quality good; ripens mid-season and over a fairly long period.

**Family Tree of Clyde Purple Raspberry**

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Marlboro ?       ?
    /       \
   Ruby    Coutant
    /       \
 Empire  Herbert
    /       \
Newman  Herbert
    /       \
  Watson  Honeysweet
    /       \
 Newburgh  Indian Summer
    /       \
   Bristol  N.Y. 17861
  
    Clyde
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