The Giant Colombian Blackberry of Ecuador

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THE Colombian blackberry has been grown from seed by many in this country since Dr. W. Popenoe first described it in the Journal of Heredity in 1920. The seedlings have been hard to grow, and in no case of which I have knowledge have they flowered and fruited. Not only is this blackberry hard to grow, but it also probably requires photoperiod of about 13 hours to flower and fruit.

The giant-fruited Colombian blackberry (*Rubus macrocarpus* Benth.) was described by Popenoe from plants observed near Bogota, Colombia. Later, however, he saw this or related blackberries in other countries, particularly Ecuador, where the author has also seen them. A survey of herbarium material and the literature shows that species of the subgenus *Orobatus,* to which this or closely related species belong, grow just south of Cartago, Costa Rica to Venezuela and Bolivia. Species of this subgenus have two characteristics in common, rather large rose-colored flowers suggesting those of *R. odoratus* (the eastern flowering raspberry) and large broad and often leafy stipules that encircle the stems. They are simple-leafed or ternate-leafed evergreen plants. Several of the species are slender trailers; others are intermediate; and several have stout but clambering canes and large leaves. None that were observed were erect growing.

Among the names listed for species of this group are *Rubus acanthophyllos* Focke, Colombia and Peru; *R. andicola* Focke, Ecuador and Peru; *R. bullatus* Rusby, Bolivia; and some 17 other species. These 20 *Rubus* species have been applied to forms of the subgenus *Orobatus.* Undoubtedly other names have been given to herbarium material that belong in this group. It will take extensive study in the herbarium and probably in the field to determine just how many species should be set up. Most of the plants I observed, even in one locality, differed greatly from each other. Besides differing in size and type of plant, the species differ in having simple to ternate and thin to very heavy leaves, as well as in hairiness of stems, leaves and other parts. The fruits are small to giant in size. Basically, the species suggest very ancient segregates of a cross such as *Rubus odoratus* x *R. hispidus* of eastern United States. There are forms or species related to these two in Mexico, Central America, or northern South America, from which the group may have originated.

In northern Ecuador, near El Angel along the Pan American highway, there are a few plants that are undoubtedly hybrids of *Rubus roseus* or *R. macrocarpus* with some species of subgenus *Eubatus* or possibly *R. floribundus.* Thus the giant blackberries probably can be crossed with species of other subgenera of *Rubus.*

Popenoe collected and sent to the United States seeds of *R. macrocarpus* as the giant-fruited blackberry. However, *R. nubigenus* closely resembles it, and *R. roseus* is similar but is supposed to have smaller flower and fruit clusters, and leaves that are nearly glabrous on the lower surface. Both of the last two species seem to have a wider distribution than *R. macrocarpus.* This *Rubus* group, with numer-

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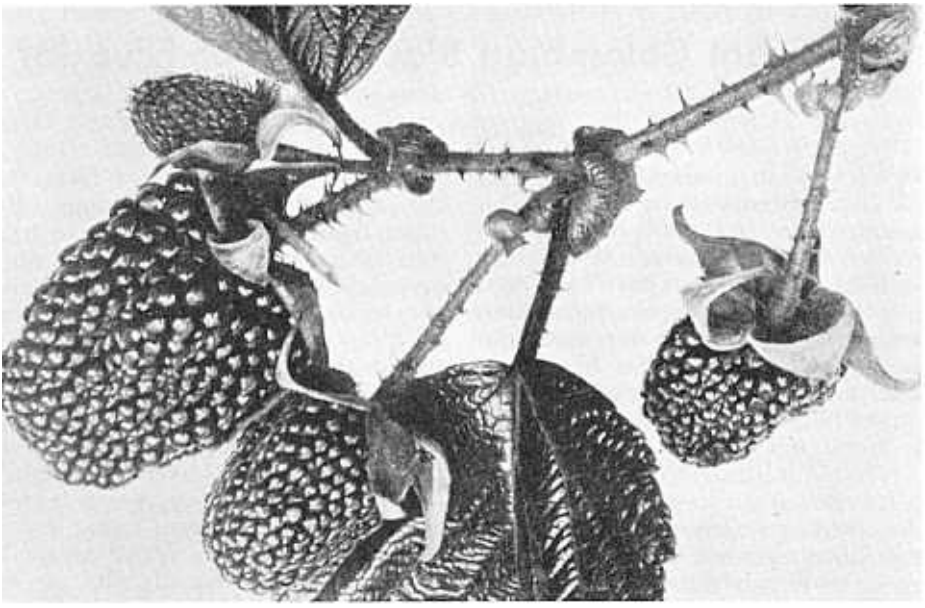

Photo by Popenoe

Fig. 1. **The Colombian giant blackberry (natural size) at an elevation of about 10,000 feet near Bogota, Colombia. Individual fruits measured 2¼ inches in length, but much larger ones have been reported.**

ous species, is worth collecting, testing, and studying because of the immense size of the berries of some of them. However, they are not closely related to our eastern North American forms of *Rubus*.

The size of the largest fruits must be immense. Popenoe's photographs show fruits very nearly 2½ inches long. However, F. M. Chapman, of the American Museum of Natural History, wrote of fruit seen near Bogota, Colombia, which he estimates as 3½ to 4 inches long and 2 to 2½ inches in diameter. The fruits I have seen were light crimson in color, like Popenoe's description. The flavor of a single mature berry that I tasted slightly resembled that of the Logan. Its size was somewhat larger than that of the largest Boysen I have seen, but not so large as the berries Popenoe photographed.

The seed I collected was no larger than some of our blackberries. Although it did not seem well filled out, it germinated after several weeks. At first, during the long days of the summer, the seedlings grew slowly. But in March, April and May, they grew vigorously. Then, in the hot weather of July and August, most of them died.

Because of the trailing and clambering growth habits of the plants that I have seen, and of those Popenoe described, none of this group may be directly useful for cultivation. But they may prove useful in breeding. They should contribute useful characters such as immense size of fruit, vigor of plant, adaptation to short photoperiods. Since the only disease noted was a leaf rust, they might also contribute disease resistance.