

## Screening of Goraka (*Garcinia quaesita* Pierre) cultivars for high yield and fruit quality

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Goraka (*Garcinia quaesita* Pierre) belongs to family Clusiaceae and is a medium sized evergreen shade loving multipurpose tree species. It can be successfully grown in a wide range of soils in the wet and intermediate zones of Sri Lanka and there is a tremendous potential for introduction into home gardens as a cash crop. It also has an export potential but the demand cannot be satisfied due to lack of continuous production and poor quality of the product. There are two types of plants, male and bisexual. These cannot be identified when they are at seedling stage. Therefore, studies were carried out in the Horticultural Crop Research and Development Institute, Gannoruwa and the Horticultural Research Farm at Weerapana to develop a bisexual type of variety having high yield and quality fruits.

Exploration for goraka varieties was mainly done at Weerapana Horticultural Farm in Hambantota district during 1997-1998. Five accessions including one yellow fruited accession was collected and bud woods of these were cleft grafted on to seedlings raised from goraka seeds. The grafted plants were planted in Weerapana and Gannoruwa in the year 2000. One accession that bears fruits early in both locations was characterised and evaluated for yield and fruit quality. Fruits of this variety were also analysed for acidity and Brix.

The variety had bisexual flowers, early bearing and bushy type tree. The tree was short and small statured around 2.5 m height. It bears fruits within three years, and days to fruit maturity ranged from 100-120 days. The main flowering and fruiting periods were February-March and June- August, respectively. The average yield of five-year-old plant was 100 fruits, and dry weight of segments per tree was 500g- 750g. The fruit weight varied from 83g to 226g, and dry weight of segments varied from 8g to 26g. The colour of the fresh segments was reddish orange. The percentage of tartaric acid and Brix (dry wt. Basis) was 18.9% and 6.0 respectively. The variety was designated "Weerapana" and released by the Department of Agriculture in 2005, for cultivation in home gardens.

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