

B-95: A new papaya (*Carica papaya* L) variety with desirable characters for local and export market

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Papaya cultivation encounters many constraints, more so when done on a commercial scale. i.e. emergence and development of a large number of male plants, absence of a single variety with well defined quality characters, inherently poor yielding trees over crowding of fruits etc. A breeding programme was started at HORDI, Gannoruwa with the intention of meeting these demands.

Nine introductions and sixteen selected local clones were subjected for evaluation in this study. A plant of an alien germplasm had performed very well and was selected for further evaluation by selfing. The selection and selfing programme was continued upto the 4th generation. The assessments done were as follows: Varietal characteristics, physico chemical characteristics, sensory evaluation test, post harvest storage, value added products, exporters comments and yield performance.

According to the physico-chemical characteristics, this variety is sweet (Brix 13), had more flesh, the colour of the skin is uniform deep yellow with an attractive red coloured flesh. The disagreeable smell normally associated with papaw is absent. The variety has a good appearance with smooth skin, free of freckles/blemishes. The fruits are also firm. According to sensory evaluation test, 97% of the panellists rated it as good and out of that 43% liked it very much. The performance for sweetness and texture was mostly average but for the colour it was 90%. Storage study revealed that this can be stored between 4-6 days at ambient temperature without any changes. Fruits can be stored upto

two weeks, at 10°C indicating its suitability for export by sea. After dehydration the variety gave high quality products. Exporters are highly satisfied with the following special features of the variety: good ripening process, uniform colour and good taste, absence of blemishes on the peel and withstanding transport and easy packing.

Sex ratio of the 4th generation of this variety was 63% hermaphrodite, 30% female and very few male plants. The average fruit weight was about 650g. The first and second yields of the 4th generation were 9000kg/ha and 45,000kg/ha respectively. Over crowding of fruits is absent.

The variety was officially released under the name "Rathna" in 1997 by the Department of Agriculture.