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Studies on wedge grafting of wall anoda (*Anona glabra* Lin) Using different scions

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Wall anoda (*Anona glabra* Lin,) belongs to family Anonaceae, is a small tree, some what swollen at the base, naturally grown in near swamps & river banks. Also this plant has Quick growing ability & tolerance to flooding as well as salt conditions. In Sri Lanka this plant is a problematic weed especially wet zone low lands as well as paddy fields.

The fruit is a heart shaped. When fully ripped it has yellow colored skin. The pulp is orange colored and has smooth aroma. The raw fruit is edible but there's no commercial value on it.

Seedlings of *Anona globra* are quick – growing and more vigorous, the taproot is branched & with less fibrous roots. Since the tree tolerates for flooding and marshy conditions, plant is very suitable for use as a root stock. This study was undertaken to observe the suitability of using *A. globra* as a stock plant to four edible commercially cultivated varieties. Research was conducted at the faculty of Agriculture, University of Ruhuna.

Three months old ploy bagged *Anona glabra* saplings were used for the stock plants. Experimental design was RCBD with five replicates. Each replicate has 10 plants and blocking was done according to the diameter of stock plants. Different scions were used as *Anona reticulata* (weli anona) (T1), *Anona muricata* (katu anona) (T2), *Anona cherimola* (Cherimola) (T3), and *Anona squamosa* (seeni anona) (T4).

Wedge grafting technique was applied. After 21 days successful percentage, number of leaves, number of branches in the scion part was measured as non destructive method and it was continued up to another two months period. (80 days after grafting) Treatment 2, 3, and 4 showed significant success than treatment one, three weeks after grafting ($p > 0.05$) T₁ showed the lowest success percentage (2%). Eighty days after T₂ grafting showed significantly higher success percentage (69%) and number of leaves than T₃ and T₄. It was concluded *Anona muricata* was the best scion for wedge grafting with *Anona gabra*.

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