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TITLE : Studies on the development of value added products from commercially important medicinal plants of Sri Lanka.

ABSTRACT

This report deals with studies on *Rauwolfia densiflora* and *Solanum xanthocarpum*.

The estimation of dry matter, solasodine, and glycoalkaloid contents of *S. xanthocarpum* at various development stages, the effects of nitrogen fertilizer levels and plant spacings were investigated. The studies indicated that the best time for harvesting and the best N-fertilizer levels are 3 1/2 months after transplanting and 80 kg/ha respectively.

The antimicrobial and pharmacological studies on *R. densiflora* were conducted. *Staphylococcus aureus* was affected by all alkaloid fractions. The extract of the root bark was more active than the leaf extract.

The sedative properties of *R. densiflora* were examined in rats by using Rat Hole Board technique. The study revealed that the plant contains one or more sedative compounds.

Ajmaline, isoresserpiline, peraksine, vomifoline and three new indole alkaloids, lankanescine, sridensine and lankafoline were isolated and identified from the plant extract.

Preparation of value added products from *C. roseus*, and *Gloriosa superba* too was carried out.

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