

Pharmacognostical studies of a market sample of parpataka *Rostellularia prostrata* (Roxb. ex. C.B. Clarke) R.Br.

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SUMMARY

Rostellularia prostrata is used as Ayurvedic drugs for the treatment of fevers, acute bleeding, respiratory infections and post-partum treatment. The botanical, macro-, microscopic characters, macerate, histochemical details and phytochemical details are presented.

Key words : Macro-, Microscopical characters, Macerate, Phytochemical, Fluorescence studies

Parpataka is an important ayurvedic drug esteemed as a specific remedy for all types of fevers. It is bitter, light, cooling and constrictor. It is useful in the treatment of Raktapitta (haemorrhage), jwara (fever), thrishna (thirst), bhrama (giddiness), daaha (burning sensation) (Lakshmi pati, 1973). The drug is diuretic, anthelmintic, digestive and constipating. The accepted botanical source of the drug is *Fumaria indica* (Anonymous, 1978). The whole plant possess medicinal properties (Sharma, 1983 and Nesamony, 1985).

Some of the plants used as parpataka are *Polycarpha corymbosa* (L.) Lam., *Glinus oppositifolius* (L.) A DC., *Mollugo nudicaulis* Lam., *Hedyotis corymbosa* (L.) Lam. and its allied species, *Glossocardia bosvallea* (L.f) DC., *Rostellularia procumbens* and *Rungia repens* (L.) (Nees Chunekar, 1999; and Vaidya, 1982). In addition to above mentioned taxa *Rostellularia prostrata* also used by the local physicians and tribes for curing acute bleeding and fevers in respiratory infections. It has been used in post-partum treatment (Sudhakar, 2001).

During a market survey of crude drugs, it was observed that a drug locally known as pararpata is extensively used as Ayurvedic preparation. Hence, it became necessary to identify this market sample of the drug botanically.

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MATERIALS AND METHODS

The plant material was collected from Tirupati. The voucher herbarium specimen was processed followed by standard procedures (Jain, and Rao, 1977). Macro- and microscopical studies were carried out (Johansen, 1940; Wallis, 1985) during the year 2005.

Fluorescence analysis was carried out by standard methods (Kokoski *et al.*, 1958; Chase and Pratt, 1949; Krebs *et al.*, 1969; Khandelwal *et al.*, 1996). The powder of the drug was examined under visible and ultra-violet light the results are given in Table 2.

Taxonomy:

A small pale prostrate herb. The branches long and diffusely spreading from a stout root stock some times almost woody. Branchlets striate, bending above nodes, 15-30 cm. Leaves ovate or (sub) orbicular, 1-2.5 x 5-2 cm, base rounded to acute, apex obtuse to acutely apiculate, petiole 0.7 cm, spikes linear terminal or at the forks of dichotomy 8mm, the flowers pale pink, bracts and bracteoles lanceolate 2.5 mm scarious, ending in one or two hairs. Calyx lobes 4, almost free, lanceolate, 3 mm, scarious, acute ending in 1 or 2 hairs. Corolla 4 x 2 cm across, tube 2 mm. Stamens 2, 2.5 mm, anther cells 0.5 mm. Ovary 1.2 mm, style 3 mm, hairy below. Capsule oblong 4x1.2 mm and minutely puberulous, seeds papillose when wet (Plate 1).

Herbarium specimen examined:

Author (210) Collected on 22nd Feb. 2006, Tirupati, Andhra Pradesh and it is deposited at the Herbarium of S.V.University, Tirupati.

RESULTS AND DISCUSSION

The results obtained from the present investigation