

Phytochemical screening of fruit of *Randia dumetorum* and Preparation of fume in the treatment of *Penisa Rogam*

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Randia dumetorum is a medicinal plant. It belongs to the family Rubiaceae. It is called in Tamil as Marukkara and in Sinhala Kukuru-maan. In Indigenous Medicine the bark, Fruit, Seeds and root of the plant are used in the treatment of various diseases. Fruit of the Randia dumetorum is used to prepare the thiri in the treatment of *Penisa rogam*. *Penisa rogam* is one of the nasal and para-nasal disorders. It is caused by the variation of the climate, taking certain foods and exposure to the dust. Nasal discharge, sneezing and nasal obstruction are the clinical features of this disease. The aim of the study was to screen the phytochemicals of the fruit of the *R. dumetorum* and to prepare the Thiri (fume) for the treatment of *Penisa rogam*. The fruits were collected from their natural habitat. These were cut into two pieces and removed seeds from the pulp. The pulp was squeeze and the juice obtained. The white cotton cloth was soaked into the juice and allowed to dry under sunshade. These procedures were repeated for three times. Finally the cloth with dried juice was kept into a sterile bottle. The juice was chemically tested qualitatively for the presence of chemical constituents such as alkaloids, saponins, tannins, steroids, flavonoids, glycosides and triterpenoids. The Preliminary phytochemical study showed that the juice of the fruit contains saponin, terpenoids, cardiac glycoside and tannin. These possess anti-inflammatory, anti-spasmodic, anti-allergic and antimicrobial activity. Anti-inflammatory activity of fruit juice could be act on the mucosa and reduce the mucosal swelling. And also hot fume from thiri may be reduced the nasal obstruction. In Siddha aspect the fruit has bitter and astringent taste. Tannin has astringent property. It causes constriction of vessel and reduces the secretion of mucus. Thiri could be used in the treatment of *Penisa rogam*. Efficacy of the thiri would be evaluated in clinical trial in future.

Keywords: Phytochemical screening, Fruit of *Randia dumetorum*, Preparation of Thiri (fume)