

EVALUATION OF BIOACTIVE COMPOUNDS OF SOME COMMON AND TRADITIONAL MEDICINAL PLANTS IN RELEVANCE WITH THE GROWTH OF PADDY

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ABSTRACT

India, in terms of its natural resources, is a very rich country as thousands of medicinal plants are found growing and can be accessed as well for their benefits. Manufacturing drugs using plant products has been a field of utmost importance these days. The therapeutic value behind such plants can be exposed to the world only if it is brought out in a consumable form. Assessing the phytochemistry of each plant before determining its medicinal property and the condition that it can target is crucial. Several phytochemical tests and bioassays are therefore necessary to evaluate the various chemical compounds in the plants. In this study, weeds viz., *Leucas aspera* (Lamiaceae), ^[1]_[SEP]*Tridax procumbens* (Asteraceae), *Justicia adhatoda* (Acanthaceae), *Alternanthera sessilis* (Amaranthaceae), *Phyllanthus niruri* (Euphorbiaceae), *Acalypha indica* (Euphorbiaceae) and six medicinal plants *Rauvolfia tetraphylla* (Apocynaceae), *Achyranthes aspera* (Amaranthaceae), *Tinospora cordifolia* (Menispermaceae), *Bacopa monnieri* (Scrophulariaceae), *Eclipta prostrata* (Asteraceae) and *Clitoria ternatea* (Fabaceae) were chosen to investigate their phytochemical composition, phenolic content, flavonoid content, anti-fungal activity and their effect on paddy seed germination. Extraction was carried out using methanol. The highest phenolic content was observed in extract of *P. niruri* (29.66mg / g GAE). In contrast *Leucas aspera* showed highest flavonoid content (12.76mg / g QAE). *P. niruri* at its higher concentration indicated the reduced incidence of fungi like *Alternaria padwickii*, *Verticillium cinnabarinum* and *Drechslera oryzae* which was from 9 to 2 %, 5 to 2 %, and 10 to 3 %, respectively. These findings indicated the importance of common traditional plants in agriculture apart from their medicinal value.

KEYWORDS: Common Traditional Plants, Phenolics, Flavonoids, DPPH Scavenging, Paddy Seeds