

CYTOMORPHOLOGICAL CHARACTERIZATION OF *OCIMUM BASILICUM* AND *O. TENUIFLORUM* GERMPLASM

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Abstract: *Ocimum basilicum* (sweet basil) and *O. tenuiflorum* (holy basil) of the genus *Ocimum* (basil; Family: Labiatae) obtained from Medicinal Plant Garden, Narendrapur are grown in the experimental field plots of Kalyani University (West Bengal plains) and cytotaxonomically characterized. Quantitative estimation of essential oil content from leaves and flower tops are also performed. *O. basilicum* and *O. tenuiflorum* show $2n=72$ and $2n=36$ respectively in meiocytes. The objective of the work is to catalogue the germplasms of the species under study for proper maintenance of genetic stock(s) for future exploration.

Keywords: Basil, Meiosis, Taxonomic characterization, Essential oil, Genetic stock

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