

Development of disposable containers by using plant leaves

Over use and inappropriate use of plastics has created serious environmental problems, and as such development of Eco-friendly materials as disposable containers appears to have considerable bearing to reduce the plastic usage for such purposes. Present research is an attempt to assess the suitability of leaves of "Kennda" (*Macaranga peltata* Muell. Arg) and "Kottamma" (*Terminalia catappa* L) to make disposable dishes and plates.

Objectives of these experiments were to test the possibility of preparing dishes and plates with leaves having single layer, double layer and triple layer thickness. A paste of "Belly" (*Aegle marmelos* L) fruits was used to paste leaves.

Sample of 25 leaves were randomly selected from both types of leaves, and length, diameter and thickness of leaves were measured. Three shapes of steel containers were

used as molds. There were three treatments in the experiment. *Viz.* Compaction of fresh leaves, in between the two plats of the mold, Compaction of leaves after 2 minutes of blanching and pressing in between the two plats of the mold, Compaction of leaves after 25 minutes of blanching and pressing in between the two plants of the mold.

All sample of leaves were sun dried after pressing in molds. Colour and stiffness of the containers after the drying were visually examined. Results revealed that the containers having double layers of leaves had better visual appearance. No significant difference in stiffness, among the treatments were observed. The brown patches were observed in the containers made out of fresh leaves. However blancher leaves gave evenly distributed pale green colour without any patches.