

Title Dry storage of cut rolled leaves of *Ctenanthe setosa* on foliage postharvest longevity and quality

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Abstract

Grey-maranta (*Ctenanthe setosa*, Marantaceae) is a herbaceous plant native of Brazil with potential to be used as a new cut foliage for local ornamental market as well as for international ones due to its decorative leaves with dark and metallic green bands and reverse purple. This study evaluated grey-maranta rolled leaves dry storage, aiming to enhance total postharvest period and making foliage handling practices easier during the distribution chain. The experiment was conducted in a complete randomized design with three replications (three petioles in each vase) and seven treatments: control (cut petioles were placed immediately in distilled water) and six periods of rolled leaves dry storage (1, 2, 3, 4, 5, and 6 days, inside closed cardboard boxes, at $25 \pm 1^\circ\text{C}$; 65-70% relative humidity). Foliage from all storage periods showed a complete leaf blade unrolling, after petioles were recut 2 cm from the base and placed in distilled water. Leaves stored at all studied periods showed the same vase-life of control leaves, according to Tukey's multiple range test. Total postharvest longevity (days of dry storage plus days of vase-life) of leaves stored for 3, 4, 5, and 6 days was significantly longer than control. During a vase-life period of 9 days, leaves stored dry did not differ significantly from control as to foliage color and brightness, and as to leaf rolling percentage. Leaves stored for 4 days showed a significant smallest loss of accumulated fresh mass percentage during vase-life compared to control by the t test as to parallelism of treatments lines. Leaves could be stored dry for 4, 5, and 6 days without quality loss, and with a gain on total postharvest longevity.