

Title Meta-Topolin: A potent inhibitor of leaf senescence in *Pelargonium* Cuttings
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Abstract

Senescence in plants is initiated and accompanied by protein breakdown, disintegration of chloroplasts followed by chlorophyll loss. Aromatic cytokinins such as meta-Topolin (*mT*) are reported to have anti-senescence activities. Hence, they play an important role in delaying the onset of leaf senescence. We examined the possible use of mT in delaying leaf senescence in *Pelargonium x hortorum* cuttings cultivar 'Katinka' without adversely retarding rooting. mT-treated leaves maintained low leaf chroma and high hue values because they remained green. Applying mT to *Pelargonium* cuttings had no effect on the rooting proportion (%). However, it reduced all other root parameters studied. Our study showed that mT is very effective in retarding leaf senescence. When taken together with the ease of rooting cuttings makes it a suitable alternative to thidiazuron (TDZ) in delaying the onset of leafyellowing in plants.