

Title Xylem occlusions in the stems of common lilac during postharvest life
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Abstract

Flowering stems of lilac wilt within a few days of cutting and placing in water, probably as a consequence of xylem blockage. The aim of this study was to identify the types of occlusions blocking xylem vessels during the postharvest life of common lilac stems cut between March and May, and the possible associations of these occlusions with the holding solution used. Scanning electron microscope observations of the basal parts of cut lilac stems (1–5 cm) revealed that the blockage of xylem vessels was caused primarily by tyloses and less so by microorganisms. The number of tyloses depended on the holding solution used during the postharvest life. The biggest number of tyloses was observed in stems kept in water in all harvesting periods. In this solution, in ca 40% of observed vessels, tyloses were visible. The highest number of tyloses according to harvesting period was observed in May.

<http://www.springerlink.com/content/d03j61mg223518r7/fulltext.pdf>