

Title The postharvest quality of cut lily flowers and potted lily plants
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Abstract

As in other flowers, the vase life of cut lily flowers depends on the cultivar, cultivation, the conditions during storage and transport, and those of vase life. This review focuses on the physiological reasons for the end of vase life. These reasons can be grouped according to three categories: imbalance in hormone levels, inadequate carbohydrates, and adverse water relations. Before discussing these backgrounds I will examine the symptoms that limit the vase life of many lily flowers. Lily hybrids are categorised into several groups. The main groups for cut flower production are Asiatic hybrids, Oriental hybrids, *Lilium longiflorum* hybrids (also called *Longiflorum*) and LA-hybrids (due to their *Longiflorum* and Asiatic background). Flowers with two whorls of coloured floral leaves have no sepals, and all floral “leaves” are called tepals. The inner whorl, consisting of three tepals, is homologous to the petals in flowers with separate petals and sepals. The outer whorl, also consisting of three tepals, is homologous to the sepals in flowers with separate petals and sepals. This review will focus on cut inflorescences, but for comparison several data from potted plants will also be discussed.