Effect of postharvest chemical treatment on longevity of cut Alstromeria flowers

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In this study was evaluated the effect of post harvest treatment with two different conditioners on keeping quality of Alstromeria hybrida, cv. Orange Beauty, grown in a glass-covered green house. Flowers were harvested during morning hours when the primary florets were two days before opening. Immediately after harvest, the flowers stem was recut at 60 cm and 24 hours pulse treatment with three variants. The control variant was distilled water which has been used to prepare the second and the third variant. The second variant was a solution containing dextrose, like energetic substrate and pounded ember to prevent the attack of bacterium. The concentration of dextrose was 2% and ember 1%. The third variant of experimental conditioner was a solution containing 8-hydroxychinoline citrate, to delay the senescence, dextrose like nutritious substrate and gibberellic acid to prevent the early leaf yellowing. The concentration of HQC was 0.2%, dextrose 2% and GA 0.02%. The whorled inflorescence of each flower consisted five or six cymes included two or three florets. The length of cymes for all variants was about ten centimeters. When flowers were placed in water harvest the development of secondary florets was delayed and the tertiary florets – if it had it, did not grow or open. At all variants florets within the whorl opened synchronously and senescence of primary florets occurred a day before the secondary florets open. Post harvest pulse treatment with HQC + D + GA extended the vase life of all inflorescence, increased the petal length of both primary and secondary florets. Moreover, such treatment completely inhibited foliar yellowing.