

Title Research on lengthening the shelf life of 'Cat Eyes' chrysanthemum cut flower
Authors Yuniarti, P.E.R. Prahardini, P. Santoso
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Abstract

Chrysanthemum is the most popular cut flower with highest demand in East Java. Among the spray kind, 'Cat Eyes' with yellow petal is the most preferred variety. Preliminary study showed that the use of distilled water containing potassium nitrate, silver thio sulfate, citric acid, benzyl amino purine or nutritive element at various concentrations can prolong the shelf life of 'Cat Eyes' variety compared to those dipping in gibberellic acid, sucrose, acetic acid or "aspirin" at various concentrations and distilled water or spring water from the farm location. The aim of the research was to determine the best dipping solution for lengthening the shelf life of 'Cat Eyes' chrysanthemum cut flower. The research used 'Cat Eyes' variety, harvesting from farmer's farm in Tukur district, Pasuruan Regency, East Java from January to June 2006. Harvesting was done in the morning and flower samples were selected from 70% opening bud. The stems were cut as long as 80 cm and every 10 flower stems, flowers were packed with paper then dipped in the spring water and transported to the post harvest laboratory of AIAT East Java in Malang city. Arrived in the laboratory, flower samples were selected and 3 flowers per stem were taken, then all the rest of the flowers was removed. The flower stems were cut as long as 60 cm and all the leaves were removed except 3 leaves below the flower. Each flower stem was then dipped in 150 ml treatment solution which was placed in 500 ml glass bottle. All treatment bottles were then placed in ambient temperature. The research used Fully Randomized Design with 5 kinds of dipping solution made from distilled water containing several preservatives such as potassium nitrate, silver thiosulfate, citric acid, benzyl amino purine and nutritive solution with several concentrations as treatments, replicated 3 times. Observation was done on the length of storage life of the flower, calculated from the day of harvesting until the petal began to wither. The result showed that the use of 500 ppm potassium nitrate or 100 ppm silver thio sulfate can prolong the storage life of 'Cat Eyes' chrysanthemum from 11 to 21 days after harvesting.