

## **Abstract:**

Sunflower, as a cut flower species, has been holding for several years a growing economic importance on Italian markets and internationally. The data existing in the literature concerning the senescence physiology of cut sunflowers are still scanty. Vase life with commercial preservative products is estimated around 8 days with a variability within the different cultivars ranging between 5.3 and 14.7 days. From the experimentation here carried out, the importance of using preservative solutions based on surfactants (Irol) has arisen, entailing a life increase of cut flowers of about 30% compared with the use of only deionized water. Furthermore, a trial was made to verify the possibility of using 1-methylcyclopropene (Ethylbloc<sup>®</sup>) to prolong the vase life of cut flowers of sunflower. The first data collected show that 1-MCP seems to have a limited efficacy in the delay of senescence, however not to the same extent of what is already known for other flower species. Of a particular interest is the anticipated harvest of the flower stems of even 3-4 days, since it is possible to obtain a complete flower opening after about three days of vase life. Pulsing, even if on the one hand may give intermediate results in the improvement of qualitative parameters of cut flowers, on the other hand it carries on a considerably interesting action in increasing the fresh weight of the leaves.