Hydroponics Screening of Chrysanthemum Germplasms for Salt Tolerance

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Abstracts—An experiment on hydroponics screening was done in Chrysanthemum germplasms to test tolerance to salt. It was determined by performance comparisons against control tests (without Nacl treatment) which acts as an indicator. Ten Chrysanthemum germplasms were selected for the experiment viz., Garden Beauty, Shanti, Red Stone, Basanti, Yellow Reflex, Ravi Kiran, Anmol, Mother Teresa, Sweeta Singa, Jaya. Suckers of Chrysanthemum germplasms were kept in plug trays for rooting in shade net and transferred after sufficient root establishment. Nutrient solution was used in hydroponics system and rooted cuttings were kept in Hoagland solution for a week. Treatments was given after a week using 0 mM Nacl (control) and 150 mM Nacl. Interaction effect of salinity and species was significant for the parameters studied. All the growth parameters decrease with increasing salinity levels viz., plant height, leaf area, leaf numbers, shoot dry weight, chlorophyll a:b ratio an total chlorophyll content whereas proline and Na concentration increased with increasing salinity.