THE PERSPECTIVITIES OF MICRICLONAL PROPAGATION OF *ACER PLATANOIDES* L. CRIMSON KING (ACEARCEAE JUSS.)

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Clonal micropropagation – massive asexual propagation of plants from cell and tissue culture; the resulting plants are genetically identical to the original copy. The conservation of plants by tissue culture methods is of great interest and will probably become even more common in the future. The advantages of this method are numerous, but we find it most important that the initiation of cultivation requires only a single plant, a seed or a single explant (apex, meristem, bud, piece of leaf, stem etc.), thus, the available plant specimens (which can be only a few) will not be affected by harvesting them from their habitat.

The state program "Developing of the scientific basis for the sustainable reproduction of valuable specimens of the botanical garden collection in *in vitro* culture" is being conducted in the laboratory of biotechnology of the Tashkent Botanical Garden of the Institute of Botany, Academy of Sciences of the Republic of Uzbekistan, directed at microclonal propagation of many valuable species presented in a single copy, as well as species in demand in urban greening programs.

Acer platanoides L. Crimson King variety (Acearceae Juss.) is a deciduous, slow-growing tree, reaching 15 m with age. The crown shape is wide-round and even. The leaves are large, 5-7 lobed, deep purple, and do not change color throughout the growing season. The trunk is smooth, dark in color, with clearly defined longitudinal grooves. Because of its graceful shape, the Crimson King variety is extremely popular. It is actively planted in city yards, parks, and roadsides. Suitable for landscaping.

Within this state program the protocol of microclonal propagation of *A. platanoides* Crimson King variety has been developed to propagate this species for Botanical Garden collection as well as for greening programs.

Solutions of sodium hypochloride (4-6%), hydrogen peroxide (2-15%), silver nitrate (0.01%), Tween20, ethanol (70%), and some other sterilizing agents were tested for developing a protocol for sterilization of maple explants. "Belizna" solution, "Domestos" sterilizing soap, fungicides difenoconazole, mancoseb and metalaxyl, fludioxonil, propiconazole, antibiotics streptomycin, amoxicillin, gentamicin, and etc. were also implemented for explants sterilization.

As a result of the studies, it was determined that the most optimal source of explants are branches with apical (10% regeneration) and lateral (100% regeneration) buds of the annual shoot of *A. platanoides* Crimson King variety. Plant growth environment is important in the success of *in vitro* propagation. Thus, explants obtained from trees growing in the arid areas of massive Kuylyuk in Tashkent, were characterized by low viability and a high degree of infection with fungal diseases in comparison with explants obtained from trees growing in Hastimom Square in Tashkent, where trees are watered daily.

We found two ways of *in vitro* propagation of *A. platanoides* L. variety Crimson King: 1. With the use of microcuttings. 2. Indirect organogenesis with induction of callus. The best way for *A. platanoides* L. variety Crimson King became indirect organogenesis trough induction of the callus in the WPM - Wood Propagation Media, hormone free or with 6- benzilaminopurine in the media. The duration of the developing of a plant usually takes 6-9 months.