

ACCLIMATIZATION OF MICROPROPAGATED PLANTS OF *Arbutus unedo* L. (STRAWBERRY TREE)

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The genus *Arbutus* (*Ericaceae*) includes about 20 species from which *Arbutus unedo* is the most interesting. The production of a spirit represents the main income. The plant is highly resistant to forestry fires and grows in poor as well as in water deficient soils, making it an ideal species to recover degraded lands and to prevent forestry fires. Adult plants of strawberry tree were selected for its potential for fruit production. Branches (30 – 40 cm length) were collected in the field and maintained in the green-house or culture chamber until epicormic shoots start to develop. Following sterilisation, shoot tips and nodal segments were tested to establish the *in vitro* cultures. Best results (38.7 ± 9.8 %, survival rate) were obtained with shoot tips (< 2 mm). Shoot proliferation was achieved on a basal De Fossard medium and 9 μ M BA. The highest root (93.3 %) rates were achieved when shoots were inoculated in root induction medium, Knop with 24.7 μ M IBA (6 days) or dipped on 9.8×10^3 μ M IBA (for 15 sec), and followed by its subculture (5 weeks) on the same medium without growth regulators and containing charcoal (1.5 %). Following root development, the plantlets (600) were transferred to containers (covered) to the greenhouse. The levels of humidity were gradually decreased by raising the covertures. As substrate was tested: (1) sand, composted pine bark and peat (50: 35: 15% vol.); (2) perlite, peat (70: 30% as well as 50: 50% vol.); (3) perlite (100%). All of them were supplemented with slow release fertilizer (0.6 g/plantlet). It was also tested perlite 100% without fertilizer, where Knop solution was weekly sprayed after 1 month. Plants were transferred to individual 220 cm³ containers. After 3 months, plant survival rate was recorded. Best results were achieved with perlite 100% without fertilizer (98.8%).