95-0352

The invention relates to the biotechnology and may be applied in the agriculture for microclonal reproduction of the potato.

The process includes the meriastem excision, the transfer thereof on the growth medium, obtaining of virusfree plants, transplanting thereof into the fetilized soil medium, growing in conditions excluding the repeated infection, the plant micrografting and transplanting of microcuttings for rooting. The novelty of this process consists in the fact that the microcuttings before rooting are kept to mature during 3-5 hours in the new prepared distillate comprising magnetic liquid in an amount of 0,00002-0,00004 g/l. The microcuttings are fixed in the solution for a depth of 1,0-1,5 cm. Then the microcuttings are transfered for rooting in the Knop growth medium where supplementary is introduced furostanolic saponin 5α - furostan - 3β, 22, 26 - triol -3-[0-β-D-glycopyranosyl (1→2)- β-D-glycopyranosyl (1→4)-β-D-galactopyranoside]-26-O-β-D-glycopyranoside in an amount of 0,01-0,1 g/l.

The technical result consists in increasing the amount of mucrocuttings, obtained from the mother plant, increasing the number of the rooted cuttings and taken roots plants as well as the minitubers from a single plant.