The aim of the work was to establish the effective culture medium for the regeneration of *Physalis peruviana* for further micropropagation and obtaining of adult plants from regenerants *in vitro* conditions. After conducting series of experiments, effective culture media for the regeneration
of

P.

*peruviana*

was established. The most effective media for shoot regeneration from leaf explants were MS

supplemented with 1 mg/l Kin and 3 mg/l BAP; MS

supplemented with 2 mg/l Kin and 1 mg/l BAP (33.33% of regeneration on both media). Good results were obtained on the media MS

supplemented with 1 mg/l Kin and 2 mg/l BAP (28.57% explants regenerated) and MS

supplemented with 2 mg/l Kin and 3 mg/l BAP (26.31% of regeneration). Root induction from stem and leaf explants were obtained of medium MS

with NAA (0.2 mg/l; 0.5 mg/l), IAA (0.2 mg/l; 0.5 mg/l). Root induction frequency of these media was 100%. The obtained regenerants were separated from the explants and were transferred on the medium MS

with 1 mg/l of BAP for elongation, and then on a medium MS

or MS

with 0.2 mg/l NAA for subsequent rooting. After one month of cultivation on mediums MS

or MS

with 0.2 mg/l NAA were successfully received adult plants.

**Key words:** *Physalis*, regeneration.

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{ spoiler title=References }

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