

Effect of salicylic acid on intracellular protein metabolism in *Polyscias filicifolia* tissue culture

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Abstract

The effect of salicylic acid on the general protein state in cultured cells of *Polyscias filicifolia* strain was investigated. It was found that introduction of salicylic acid in different concentrations into the culture medium had a dose-dependent effect on intracellular protein content. Significant increase in total protein content in cells under the influence of salicylic acid in doses of 0.05 and 0.1 μmol per 100 g crude biomass was observed. Higher doses of salicylic acid (0.17 μmol / 100 g crude biomass) lead to decrease in intracellular protein content. Introduction of salicylic acid (0.1 μmol / 100 g crude tissue) into *Polyscias filicifolia* cell culture medium caused induction of intracellular protein biosynthesis in callus cells on the background of reduced degradation and prolonged functioning.