

Impact of trans-resveratrol on the activity of conidium of the *Botrytis cinerea*

Stilbenoids are phytoalexins-secondary plant metabolites, responsible for the protection of grape vine and of multiple plants species from bacterial and fungal infection. It has been researched the change of stilbenoids of the skin of Georgian white grape vine – Rkatsiteli in the condition of the diseased botrytis bunch rot (*Botrytis cinerea*). The results of the study are revealed the stress-metabolite stilbenoid trans-resveratrol. The physiological concentration of the trans-resveratrol in the skin of the grape is equal 2, 5 mg/kg, to the diseased grape skin it is raised up to 5 mg/kg. Impact of trans-resveratrol at the activity of conidium of *Botrytis cinerea* has been studied by its water suspension. Control option: conidium suspension was sprayed to the grapes washed with distilled water. Study options: Grape berries washed with distilled water were processed by water suspension of trans-resveratrol – 0.5 mg/ml and 1.0 mg/ml. Then on them was sprayed a conidium suspension. In the control option conidium began multiplying after one week. The disease was shown as a gray snowflake. After two weeks all grape berry was diseased by 70-80%. Conidium of the *Botrytis cinerea* isn't multiplied over the grapes, produced by trans-resveratrol suspension during one month. The results of the study were confirmed the phytoalexin function of trans-resveratrol- inhibitory action towards *Botrytis cinerea*.

Biography

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