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PERFORMAND NEW VARIETIES OF *SALVIA SCLAREA* (CLARY SAGE)

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In Moldova, the varieties of hybrid origin of *Salvia sclarea* L., which bloom and produce raw materials and essential oil in the first year of vegetation and the plantations can be exploited three years, are created and homologated. The varieties are distinguished by a high production of raw materials and essential oil, different periods of technical maturity, resistance to drought, frost and wintering. The specificity of the research consists in the creation and implementation of the varieties resistant to frost, winter, diseases, performances that ensure a high productivity and a high quality, thus diminishing the negative consequences of climate change. In the first year of vegetation, the varieties *Ambriela* and *Parfum Perfect* form floral stems which are from 109.5 cm to 120.6cm tall, respectively, with long inflorescences (52.7 to 58.8 cm), compact, with a number of ramifications (14.5 to 18.4). These characters favor the yield structure; contribute to the synthesis and accumulation of large amounts of essential oil. The content of essential oil in the first year of vegetation has values between 1.037% (dry matter) and 1.636% (dry matter). In 2020, under conditions of severe drought, the tested varieties, that were in the second year of vegetation, synthesized and accumulated a high content of essential oil, from 1.320% (dry matter) – the variety *Ambriela*, up to 1.424% (dry matter) the variety *Parfum Perfect.* The quality of essential oil is excellent due to the high content of linalyl acetate and sclareol. The variety *Ambriela* is a complex hybrid with constant heterosis. distinctive by: Physiological properties: Very good resistance to wintering; very high resistance to drought; Resistant to foliar diseases and root system diseases. Quality properties: Essential oil content: First year of vegetation: 0.353% (standard humidity, 70%); 1.175% (dry matter); Second year of vegetation: 0.335% standard humidity; 1.185% dry matter. Major components in essential oil: Linalyl acetate 61.06%, linalool, 8.59%, sclareol, 5.25%.

The variety of *Salvia sclarea* L. *Parfum Perfect* is a triple hybrid with a constant effect of heterosis on a number of quantitative characters, including the essential oil content. Productivity in 2 years of operation of the plantation: inflorescences: 26.9 t/ha (13.8 t/ha, first year; 13,1 t/ha, second year); essential oil content 1.267 -1.424% (dry matter). The productions of essential oil constitute 73.5 kg/ha (8.7 kg/ha, year I; 64.8 kg/ha, year II). Efficiency: 3.8 kg of essential oil per ton of inflorescences.

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