

„Virginia 0842“ – new large-leaf tobacco variety in the official variety list of Bulgaria

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Scientists from the Institute of Tobacco and Tobacco Products (ITTP) near Markovo, Plovdiv, have registered a new tobacco variety, the SAA reports. The new large-leaf tobacco variety „Virginia 0842“ has already been included in the **official varietal list of Bulgaria** and has been developed by a team of breeders, including Assist. Marina Drumeva-Yoncheva, Prof. DSc Hristo Bozukov, Assoc. Prof. PhD Maria Kasheva – current director of the scientific unit of the Academy, and Assoc. Prof. Yovcho Kochev.

Tobacco from the „Virginia“ varietal group is the most widely grown tobacco in the world and a main component in the production of American Blend and Virginia Blend cigarettes. Large-leaf tobaccos from this varietal group were introduced in Bulgaria for the first time in 1937, in the Maglizh District.

The scientific study was conducted during the period 2019 - 2022 under production conditions in the regions of Plovdiv and Pazardzhik. A complete biological characterization and assessment of the main quality indicators of the obtained tobacco raw material of the new large-leaf tobacco line „Virginia“ 0842 was carried out. The main physical parameters of the cured tobacco were determined. The main chemical indicators – nicotine, soluble sugars, total nitrogen and ash content of the tobacco – were determined. The results of the work show high nicotine values (1.02 to 3.78) for „Virginia“ 0842 compared to the control „Virginia“ 0514. The values of total sugars in „Virginia“ 0842 from the three harvests are very high in both grades (11.10 - 25.52). The ash content is low – in the range from 8.01% to 15.09%, which is an indicator of the high substance content of the leaves. Total nitrogen for „Virginia“ 0842 is in the range 1.52 - 2.85%, and for the control 3.04 - 3.61. The free burning rate of „Virginia“ 0842 tobacco was determined (2.74 to 2.85 mm/min).



variety „Virginia 0842“ – photo © SAA

Leaf size is a very important physical indicator, which is determined during the organoleptic evaluation of tobacco. Based on the length/width ratio of the tobacco leaf, conclusions can be drawn regarding its belonging to a given type. In large-leaf tobaccos, the larger size of the tobacco leaf is an indicator of greater distinctiveness

and typicality of the variety. The 7th, 14th and 18th leaves of Line 0842 from the 2020, 2021 and 2022 harvests of „Virginia 0842“ have a length close to the control and greater than the typical 50 cm for this type. Due to the high temperatures and low humidity during the three years of the study, the leaves of the line are slightly smaller in size compared to the control. Over 80% of the leaves of „Virginia“ 0842 are 50 - 60 cm long, an indicator characteristic of large-leaf tobaccos.

For the technological indicator number of leaves per kilogram of tobacco in „Virginia“ 0842, very good values are observed for the three years of the study for both grades. The percentage of midrib is approximately the same for the control and the line. From an economic point of view, the technological indicator conditional cigarette yield (number of cigarettes per kilogram of tobacco) for each variety is very important. The relationship between cigarette yield and the physical indicator leaf density is inversely proportional. The best values for cigarette yield are observed for the „Virginia“ 0842 line from the 2022 harvest for first grade and from the 2022 harvest for second grade.