

## **RESEARCH ON THE MAIN PRODUCTIVITY FEATURES IN AN ASSORTMENT OF RUNNER BEAN (*PHASEOLUS COCCINEUS* L.) IN THE ENVIRONMENTAL CONDITIONS FROM NE ROMANIA**

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### **Abstract**

This paper presents an assessment of the main features of productivity in an assortment of runner bean (*Phaseolus coccineus* L.), in the conditions from Northeastern Romania. The research was carried out during 2012 and 2013 years, on a number of 10 populations of runner bean, collected from the United Kingdom, Iași, Bacău, Suceava, Vaslui, Galați and Botoșani counties. The following yield features were determined: vigour of the plant, the number of branches / plant, the pod size, the seed size, the number of seeds / pod, number of seeds / plant, weight of 1000 grains (MMB), yield measured per plant and per unit of area (ha). The plants were voluble in all local populations of runner bean and the size was over 2 m. The plant vigour, at the whole range was medium to large. A special feature is that the color of flowers is correlated with the color of seeds: the plants with white flowers have white seeds and the plants with red flowers had violet + black seeds; the plants with red flowers and white wings had beige seeds with a brown design. The vegetation period varied between 130 and 140 days to the entire range of runner bean. The earliest population was Coccineus 2, with a period of 106 – 113 days, from sunrise to seed maturation. A thousand grain weight (MMB) ranged from 1115 g (Coccineus 2) and 1310 g (Coccineus 4), with an average of 1207,1 g. The evaluated seed yields ranged from 1735,2 kg / ha at the Coccineus 12 population and 13745, 7 kg / ha at Coccineus 9 population, with a mean of 2613,4 kg / ha.

**Key words:** runner bean, phenology, evaluated yield

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