

CHEMICAL COMPOSITION AND NUTRITIVE VALUE OF SEEDS OF SELECTED PEA VARIETIES

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Abstract. Chemical composition and the nutritive value of seeds of 10 pea varieties with white and coloured flowers was analysed. In the white-flowering varieties the activity of trypsin inhibitors was 2.93 TIU/mg and the polyphenol content 0.74 mg/g, and in the colour-flowering ones – 4.75 and 2.62, respectively. The proanthocyanidin content of seeds was 0.01 mg/kg in the pea varieties with white flowers and 0.40 - 1.66 mg/kg in those with coloured flowers. Compared with the seeds of colour-flowering pea, the yield of white-flowering ones was higher (32.8 vs. 31.3 dt/ha), and their seeds contained more crude protein (22.03% vs. 20.99%) and less NDF (18.72% vs. 20.54%). Indices of amino acid composition (EAAI and CS index) of seeds were similar. The seeds of the pea varieties with white flowers, compared with those with coloured flowers, were characterised by a considerably lower concentration of ADF and a slightly higher yield and crude protein content.

Keywords: *Pisum sativum*, chemical composition, rats, protein value, ADF.