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TASHKENT

POLYSACCHARIDES of bark *Pisum sativum*

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Pisum sativum also called garden pea, herbaceous annual plant in the family Fabaceae, grown virtually worldwide for its edible seeds. While the origins of domesticated peas have not been definitely determined, the pea is one of the oldest cultivated crops. The wild plant is native to the Mediterranean region, and ancient remains dating to the late Neolithic Period have been found in the Middle East. In Uzbekistan, 27 species of *Pisum sativum* grow which are used in folk medicine for the treatment of diabetes, calm the nervous system, anemia cleanses the blood of cholesterol and other diseases.

This work is devoted to the study of the carbohydrate complex of the aerial part of *Pisum sativum* collected in the Jizzakh region during flowering.

The carbohydrate complex was isolated according to a known method. Isolated alcohol-soluble sugars (ASS), water-soluble polysaccharides (WSPS), pectin substances (PS) and hemicelluloses (HMC). ASS according to PC data consists only of glucose. The monosaccharide composition of the isolated polysaccharides was determined by complete acid hydrolysis followed by PC analysis.

The results of the study showed that in the bark part of the plant, WSPS-1 (3.4%) and WSPS-2 (1.5%) accumulate more and their monosaccharide composition is represented by galactose, arabinose, glucose, mannose, xylose and rhamnose. (Table 1)

Table 1. Content and monosaccharide composition of polysaccharides of the bark *P. sativum*

Polysaccharides	Output, %	Monosaccharide composition					
		Gal	Glu	Ara	Xyl	Rham	UAc
WSPS-1	3.4	++	+	+	+	+	++
WSPS-2	1.5	++	+	+	+	+	++
PS	4.65	+	-	+	-	+	+
HMS	3.15	++	-	+	++	+	+

PS are a white powder, soluble in water with the formation of viscous solution - rel.6.14 (c 1%; H₂O) monosaccharide composition of PS includes neutral and acidic monosaccharides.