Mixture cultivation of legumes with oats

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Abstract

The study presents the possibilities for enlargement the range of annual legumes cultivated in mixtures with oats as alternative crops to pea through studying the interaction between the legumes with cereal components sowed in different proportions. The accessions were selected as a result of previous investigations regarding their cold tolerance, productive potential and biologic characters. As a result of this, the following legumes were included in the study: pea, common vetch, Hungarian vetch, grass pea and white lupine. The winter oat cv. Dunav 1 was used in each mixture combination. The combination of pea with oat was used as a control due to its proved economic qualities and wide utilization.

The specific biologic characteristics of each legume crop in maturity enables to receive green forage production continuously beginning with pea, followed by bitter vetch, common and Hungarian vetch, grass pea and white lupine. Bitter vetch performs high potential as an alternative crop to pea due to its high productivity in mixture cultivation, early maturity and good forage qualities.

Key words: annual legumes, oat, mixtures, productive potential

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