

UTICAJ NAVODNJAVANJA NA KLIJAVOST I ŽIVOTNU SPOSOBNOST SEMENA SOJE (*Glycine max.* (L.) MERR.)

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Vremenski uslovi, posebno količina i raspored padavina, te pojava suše, značajno smanjuju prinose i kvalitet semena soje. Nepovoljan uticaj suše može se uspešno eliminisati navodnjavanjem useva.

Ispitivanja su izvršena na tri komercijalne sorte (Balkan, Ravnica i Novosađanka) i dve linije soje selekcionisane u Naučnom institutu za ratarstvo i povrtarstvo u Novom Sadu. Seme je proizvedeno u uslovima suvog ratarenja i navodnjavanja. U laboratorijskim uslovima izvršeno je ispitivanje klijavosti (standardni laboratorijski metod) i životne sposobnosti semena primenom vigor testova (test ubrzanog starenja, Hiltner test i hladni test).

Seme proizvedeno u uslovima navodnjavanja imalo je veću klijavost primenom standardnog laboratorijskog metoda od semena proizvedenog u uslovima suvog ratarenja. Primenom ovog testa uočene su značajne razlike između ispitivanih sorti i linija. U oceni životne sposobnosti semena najviše vrednosti dobijene su primenom testa ubrzanog starenja. Značajne razlike u životnoj sposobnosti semena, između ispitivanih sorti i linija, i različitih uslova proizvodnje dobijene su primenom Hiltner i hladnog testa.

EFFECTS OF IRRIGATION ON GERMINATION AND VIGOR OF SOYBEAN SEED (*Glycine max.* (L.) MERR.)

Weather conditions especially quantity and distribution of rainfalls, as well as drought, significantly reduce yield and quality of soybean seed. Unfavorable effect of drought could be successfully eliminated by crop irrigation.

Three commercial soybean varieties (Balkan, Ravnica and Novosađanka), and two lines developed in the Research institute of field and vegetable crops in Novi Sad, were tested. The seed was produced under conditions of dry farming and irrigation. Seed germination (Standard laboratory method), and seed vigor (Accelerated aging test, Hiltner test, and Cold test) were tested under laboratory condition.

Seed produced under irrigation (Standard laboratory method) had germination value higher than the seed produced under dry farming conditions. By application of this test significant differences among tested varieties and lines were observed. In estimation of seed vigor the highest values were obtained when accelerated aging test was applied. Significant differences among tested varieties and lines and different production conditions were obtained for seed vigour using Hiltner and Cold tests.