

DRUŠTVO GENETIČARA SRBIJE  
SEKCIJA ZA OPLEMENJIVANJE ORGANIZAMA

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SERBIAN GENETIC SOCIETY  
SECTION OF THE BREEDING OF ORGANISMS

DRUŠTVO SELEKCIONERA I SEMENARA  
REPUBLIKE SRBIJE

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SERBIAN ASSOCIATION OF PLANT  
BREEDERS AND SEED PRODUCERS

# ZBORNİK APSTRAKATA

X SIMPOZIJUMA DRUŠTVA SELEKCIONERA I SEMENARA  
REPUBLIKE SRBIJE

i

VII SIMPOZIJUMA SEKCIJE ZA OPLEMENJIVANJE ORGANIZAMA  
DRUŠTVA GENETIČARA SRBIJE

VRNJAČKA BANJA, 16.-18. OKTOBAR 2023.

# BOOK OF ABSTRACTS

X SYMPOSIUM OF THE SERBIAN ASSOCIATION OF PLANT  
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AND

VII SYMPOSIUM OF THE SERBIAN GENETIC SOCIETY  
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## UTICAJ LOKALITETA NA PARAMETERE KVALITETA SEMENA PAPRIKE (*CAPSICUM ANNUUM L.*)

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Paprika (*Capsicum annuum L.*) kao komercijalna vrsta gaji se širom sveta. Godišnja proizvodnja paprike dostigla je oko 3.9 miliona tona. Površine pod zasadima paprike u Srbiji procenjene su na 10.278 ha u 2021. godini, dok je ukupna proizvodnja iznosila 147.663 tone. U ovoj studiji vršeno je ispitivanje semena dva genotipa paprike dobijenih sa lokacija Kula i Smederevska Palanka. Ispitivanje je vršeno standardnim metodama za procenu klijavosti i zdravstvene ispravnosti semena. Kvalitet semena paprike procenjen je na osnovu parametara klijanja, vlage i zdravstvene ispravnosti semena za sezonu 2022 godine. Energija klijanja iznosila je 75% (Strižanka) i 85% (Župska rana) za lokalitet Smederevska Palanka, dok je za Kulu iznosila 65% (Strižanka) i 55% (Župska rana) ( $p < 0.05$ ). Ukupna klijavost iznosila je 88% (Strižanka) i 90% (Župska Rana) za lokalitet u Smederevska Palanka, dok je u Kuli iznosila 80% (Strižanka) i 70% (Župska Rana). Sadržaj vlage dostigao je 11.5% i 11% za Strižanku i Župsku ranu, respektivno ( $p > 0.05$ ) sa lokaliteta u Smederevskoj Palanci. U uzorcima dobijenih sa lokaliteta u Kuli sadržaj vlage je iznosio 12.5% za Strižanku i 9.5% za Župsku ranu ( $p < 0.05$ ). Zdravstvena ispravnost semena testirana je na *Alternaria* spp. i *Fusarium* spp. Procenat infekcije za Strižanku i Župsku Ranu iznosio je 1% (Smederevska Palanka) ( $p > 0.05$ ), dok je u Kuli iznosio 3% za Strižanku i 5% za Župsku Ranu ( $p < 0.05$ ). Dobijeni podaci za parametre kvaliteta ukazuju na značajnu razliku između lokaliteta Smederevska Palanka i Kula. Buduća istraživanja će biti vezana za analizu zemljišta i ukupni prinos po parceli na lokacijama Smederevska Palanka i Kula.

**Ključne reči:** energija, klijavost, sadržaj vlage, zdravstvena ispravnost, lokacija

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## INFLUENCE OF LOCATION ON QUALITY PARAMETERS OF PEPPER SEEDS (*CAPSICUM ANNUUM* L.)

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Pepper (*Capsicum annuum* L.) as a commercial species is cultivated worldwide. The annual production of pepper has reached approximately 3.9 million tons. The area under pepper plants in Serbia were assessed at 10.278 ha in 2021, and overall production at 147.663 tons. Seed testing of two genotypes of pepper from two localities (Kula and Smederevska Palanka) was performed using standard methods for assessing seed quality and health, based on germination parameters, moisture and seed health obtained during 2022 season. Germination energy was 75% and 85% for Strizanka and Zupska Rana, in Smederevska Palanka, respectively. In Kula, germination energy was statistically significantly lower and accounted for 65% and 55% for Strizanka and Zupska Rana ( $p < 0.05$ ). Total germination for Strizanka and Zupska rana was 88% and 90% in Smederevska Palanka, while at Kula location it was 80% and 70%. The moisture content was 11.5% and 11% for Strizanka and Zupska Rana, respectively ( $p > 0.05$ ) in Smederevska Palanka. The moisture content in Kula was 12.5% and 9.5% for Strizanka and Zupska Rana, respectively. Seed health was tested on phytopathogenic fungi *Alternaria* spp. and *Fusarium* spp. For Strizanka and Zupska Rana amounted to 1% (Smederevska Palanka) ( $p > 0.05$ ). While in Kula amounted to 3% and 5%, respectively ( $p < 0.05$ ) and they were statistically significant ( $p < 0.05$ ). The obtained data of seed quality parameters indicated a statistically significant difference between Smederevska Palanka and Kula locations. Future research will be related to soil analysis and total yield per plot at two locations.

**Key words:** energy, germination, seed health, moisture content, location

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