DRUŠTVO GENETIČARA SRBIJE
SEKCIJA ZA OPLEMENJIVANJE ORGANIZAMA

SERBIAN GENETIC SOCIETY
SECTION OF THE BREEDING OF ORGANISMS

DRUŠTVO SELEKCIONERA I SEMENARA
REPUBLIKE SRBIJE

SERBIAN ASSOCIATION OF PLANT
BREEDERS AND SEED PRODUCERS

ZBORNIK 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
BREEDERS AND SEED PRODUCERS
AND
VII SYMPOSIUM OF THE SERBIAN GENETIC SOCIETY
SECTION OF THE BREEDING OF ORGANISMS

VRNJAČKA BANJA - SERBIA, 16-18 OCTOBER 2023

Beograd/Belgrade
2023.

Izdavač/Publisher
Društvo genetičara Srbije, Beograd
Serbian Genetic Society, Belgrade

Društvo selekcionera i semenara Republike Srbije
Serbian Association of Plant Breeders and Seed Producers, Belgrade

Urednici/Editors
dr Vesna Perić, dr Vojka Babić, dr Sandra Cvejić

Priprema za štampu i realizacija štampe
ABRAKA DABRA, Novi Sad

Tiraž
150

Ova publikacija je štampana uz finansijsku pomoć Ministarstva nauke, tehnološkog razvoja i inovacija

Simpozijum je organizovan u saradnji sa Institutom za kukuruz "Zemun Polje", Beograd i Institutom za ratarstvo i povrtarstvo, Institutom od nacionalnog značaja za Republiku Srbiju, Novi Sad

ISBN: ISBN-978-86-87109-17-9

Beograd/Belgrade
2023.

X SIMPOZIJUM DRUŠTVA SELEKCIONERA I SEMENARA REPUBLIKE SRBIJE i VII SIMPOZIJUM SEKCIJE ZA OPLEMENJIVANJE ORGANIZAMA DRUŠTVA GENETIČARA SRBIJE
Vrnjačka Banja, 16.-18. oktobar 2023.

X SYMPOSIUM OF THE SERBIAN ASSOCIATION OF PLANT BREEDERS AND SEED PRODUCERS and VII SYMPOSIUM OF THE SERBIAN GENETIC SOCIETY SECTION OF THE BREEDING OF ORGANISMS
Vrnjačka Banja - Serbia, 16-18 October 2023

Počasni odbor/

dr Miodrag Tolimir
dr Milena Simić
Prof. dr Jegor Miladinović
Prof. dr Dragana Latković
dr Aleksandar Lučić
dr Darko Jevremović
dr Dejan Sokolović
dr Milan Lukić
dr Nenad Đurić
Prof. dr Nikola Ćurčić

Naučni odbor/Scientific Committee

dr Vesna Perić, predsednik
dr Violeta Anđelković
Prof. dr Ana Marjanović Jeromela
dr Aleksandra Radanović
dr Dušan Stanisavljević
dr Ivana S. Glišić
dr Jelena Ovuka
dr Jovan Pavlov
dr Milan Mirosavljević
dr Mirjana Petrović
dr Natalija Kravić
dr Dobrivoj Poštić
dr Nikola Grčić
dr Sanja Mikić
dr Snežana Dimitrijević
dr Sofija Božinović
dr Svetlana Roljević Nikolić
dr Vladan Popović
dr Vladimir Filipović
dr Zdenka Girek

Organizacioni odbor/Organizing Committee

dr Vojka Babić, predsednik
dr Sandra Cvejić, zamenik predsednika
dr Aleksandar Popović
Prof. dr Dragana Miladinović
dr Jelena Srdić
dr Milan Jocković
dr Ratibor Štrbanović
dr Vuk Đorđević

Sekterarijat/Secretariat

Beka Sarić, master
Danka Milovanović, master
dr Iva Savić
Miloš Krstić, master
Nemanja Ćuk, master
Sanja Jovanović, master
Maja Šumaruna, master

V-POS-10

UTICAJ ČAJA RASTAVIĆA (*Equisetum arvense* L.) NA KLIJAVOST SEMENA BELOG SLEZA (*Althaea officinalis* L.), NEVENA (*Calendula officinalis* L.) I PERŠUNA LIŠĆARA (*Petroselinum sativum* Hoffm.)

Vladimir Filipović[1], Snežana Dimitrijević[1], Vera Popović[2], Vladan Ugrenović[3], Ljubica Šarčević-Todosijević[4], Snežana Mrđan[1], Željana Prijić[1]

[1] Institut za proučavanje lekovitog bilja „Dr Josif Pančić", Beograd, Srbija
[2] Institut za ratarstvo i povrtarstvo, Novi Sad, Srbija
[3] Institut za zemljište, Beograd, Srbija
[4] Visoka zdravstveno-sanitarna škola „Visan", Beograd, Srbija
e-mail: vfilipovic@mocbilja.rs

Upotreba pripravaka na bazi lekovitog bilja za ishranu i zaštitu bilja iz godine u godinu dobija sve više na značaju. Jedna od takvih je rastavić/preslica (*Equisetum arvense* L.) koji zbog silicijumove kiseline u velikom procentu suzbija pepelnicu, pegavost, sivu plesan, rđu, moniliju itd. U radu je prikazan uticaj čaja rastavića na klijavost semena belog sleza (*Althaea officinalis* L.), nevena (*Calendula officinalis* L.) i peršuna lišćara (*Petroselinum sativum* Hoffm.). Istraživanja su sprovedena u laboratoriji za semenarstvo Instituta za proučavanje lekovitog bilja „Dr Josif Pančić" u Pančevu, tokom 2020. godine. Laboratorijska ispitivanja semena obuhvatila su ispitivanje morfološko fizioloških osobina (Energija klijanja – EK, Ukupna klijavost – UK). Pre nego je seme stavljeno na klijanje, u Petrijevim posudama na filter papiru na temperaturnom režimu od 20°C – konstantno, seme je tretirano čajem rastavića (jedan deo se razredi sa 5 delova vode), druga varijanta je predstavljala kontrolnu varijantu gde je dodata destilovana voda. Laboratorijska ispitivanja semena obavljena su u skladu sa Pravilnikom o kvalitetu semena poljoprivrednog bilja, prilikom čega su zabeleženi sledeći rezultati: primena čaja od rastavića kod semena belog sleza uticala je na prosečno 59% klijalih semena, dok je kod kontrolne varijante klijavost bila daleko manja i iznosila 26%. Klijavost semena nevena je takođe imala značajno povećanje kada je tretman čaja rastavića u pitanju. Tretirana semena nevena čajem od rastavića imala su prosečnu klijavost od 73%, dok je u kontrolnoj varijanti klijavost iznosila 52%. Kod semena peršuna lišćara, vrednost treriranog semena čajem od rastavića bila je 84% koja nije bila statistički značajna u odnosu na vrednost klijavosti semena tretiranog destilovanom vodom (74%).

Ključne reči: čaj rastavića (*Equisetum arvense*), klijavost semena, beli slez (*Althaea officinalis*), neven (*Calendula officinalis*), peršun lišćar (*Petroselinum sativum*).

Zahvalnica: Ovaj rad je podržan od strane Ministarstva nauke, tehnološkog razvoja i inovacija Republike Srbije, Ugovor br. 451-03-47/2023-01/200003, 200011 i 200032.

THE INFLUENCE OF HORSETAIL TEA (*Equisetum arvense* L.) ON THE SEED GERMINATION OF MARSHMALLOW (*Althaea officinalis* L.), POT MARIGOLD (*Calendula officinalis* L.) AND PARSLEY (*Petroselinum sativum* Hoffm.)

Vladimir Filipović[1], Snežana Dimitrijević[1], Vera Popović[2], Vladan Ugrenović[3], Ljubica Šarčević-Todosijević[4], Snežana Mrđan[1], Željana Prijić[1]

[1] Institute for Medicinal Plants Research „Dr Josif Pančić", Belgrade, Serbia
[2] Institute of Field and Vegetable Crops, Novi Sad, Serbia
[3] Institute of Soil Science, Belgrade, Serbia
[4] High Medical - Sanitary School of Professional Studies, Belgrade (Zemun), Serbia
e-mail: vfilipovic@mocbilja.rs

The use of preparations based on medicinal plants for the nutrition and protection of plants is gaining more and more importance every year. One of these is horsetail (*Equisetum arvense* L.), which, due to its silicic acid, suppresses powdery mildew, spotting, gray mold, rust, monilia, etc. in a large percentage. The paper shows the influence of horsetail tea on the germination of the seeds of marshmallow (*Althaea officinalis* L.), pot marigold (*Calendula officinalis* L.) and parsley (*Petroselinum sativum* Hoffm.). The research was conducted in the laboratory for seed production of the Institute for Medicinal Plants Research „Dr Josif Pančić" in Pančevo, during 2020. Laboratory testing of seeds included examination of morphological and physiological properties (Germination energy - EK, Total germination - UK). Before the seeds were placed for germination, in Petri dishes on filter paper at a temperature regime of 20°C - constant, the seeds were treated with horsetail tea (one part is mixed with 5 parts of water), the other variant represented the control variant where distilled water. Laboratory tests of seeds were carried out in accordance with the Rulebook on the quality of seeds of agricultural plants, during which the following results were recorded: the application of horsetail tea to marshmallow seeds affected an average of 59% of the germinated seeds, while the germination rate of the control variant was much lower and amounted to 26%. Pot marigold seed germination also had a significant increase in horsetail tea treatment. The pot marigold seeds treated with horsetail tea had an average germination rate of 73%, while in the control variety the germination rate was 52%. In the case of parsley seeds, the value of seeds which treated with horsetail tea was 84%, it was not statistically significant compared to the value of germination of seeds treated with distilled water (74%).

Key words: horsetail tea (*Equisetum arvense*), seed germination, marshmallow (*Althaea officinalis*), pot marigold (*Calendula officinalis*), parsley (*Petroselinum sativum*).

Acknowledgment: This work was supported by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia, agreement number 451-03-47/2023-01/200003, 200011 and 200032.