

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

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X SIMPOZIJUMA DRUŠTVA SELEKCIONERA I SEMENARA
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i

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AND

VII SYMPOSIUM OF THE SERBIAN GENETIC SOCIETY
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REZULTATI KLIJAVOSTI I MASE 1000 ZRNA RAZLIČITIH BILJNIH VRSTA MIKROPOVRĆA

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Cilj istraživanja je bio utvrditi klijavost semena i masu 1000 zrna kod različitih biljnih vrsta mikropovrća: kukuruza kokičara (*Zea mays L.ssp. everta Sturt*), crvenog kupusa (*Brassica oleracea L. convar.capitata convar rubra*), luka vlašca (*Allium schoenoprasum*)-sorta Welta, cvekla (*Beta vulgaris*)-sorta Detroit, japanske i kineske rotkve (*Raphanus sativus*). Semena ovih biljnih vrsta mikropovrća bila su proizvedena 2022. godine. Klijavost semena je važan parametar kvaliteta semena, koji posebno dolazi do izražaja kada su nepovoljni i otežavajući uslovi spoljašnje sredine za klijanje i nicanje semena. Energija klijanja predstavlja brzinu i ravnomernost klijanja izraženu u procentima klijalih semena. Veoma važan pokazatelj kvaliteta semena je masa 1000 semena. Istraživanja su rađena prema domaćem Pravilniku o kvalitetu semena poljoprivrednog bilja, korišćena je standardna metoda između dvostrukog filter papira. Dobijeni rezultati energije klijanja i ukupne klijavosti su pokazali da najveće vrednosti navedenih parametara ima kineska rotkva u odnosu na sve ostale vrste mikropovrća. Najnižu vrednost energije klijanja je imala cvekla (51%), a najvišu kineska rotkva (97%). Najmanju ukupnu klijavost je u proseku imao luk vlašac (81%), a najveću ukupnu klijavost je imala kineska rotkva (97%). Najveću masu 1000 zrna je imao kukuruz kokičar (161,23 g), a najnižu crveni kupus (3,27 g). Najnižu vrednost energije klijanja je imala cvekla jer u omotaču semena postoji visok sadržaj inhibitora klijanja u odnosu na ostale biljne vrste. Minimalna klijavoost potrebna radi stavljanja semena cvekla u promet je 65%. Seme rotkve pokazuje najveću klijavost zbog niskog sadržaja inhibitora klijanja i oblika semena.

Ključne reči: mikropovrće, klijavost semena.

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RESULTS OF GERMINATION AND 1000 SEED WEIGHT OF DIFFERENT PLANT TYPES OF MICRO VEGETABLES

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The aim of the research was to determine seed germination and the weight of 1000 grains in different types of microvegetables: popcorn (*Zea mays L.ssp. everta Sturt*), red cabbage (*Brassica oleracea L. convar.capitata convar rubra*), chives (*Allium schoenoprasum*) - Welta variety, beetroots (*Beta vulgaris*) - Detroit variety, Japanese and Chinese radishes (*Raphanus sativus*). The seeds of these types of micro-vegetables were produced in 2022. Seed germination is an important parameter of seed quality, which especially comes to the fore when the external conditions for seed germination and sprout are unfavorable and difficult. Germination energy represents the rate and uniformity of germination expressed as a percentage of germinated seeds. A very important indicator of seed quality is the mass of 1000 seeds. Research was done according to the domestic Rulebook on the quality of seeds of agricultural plants, the standard method between double filter paper was used. The obtained results of germination energy and total germination showed that Chinese radish has the highest values of the mentioned parameters compared to all other types of micro-vegetables. Beetroot had the lowest germination energy value (51%), and Chinese radish had the highest (97%). On average, chives had the lowest overall germination (81%), and Chinese radish had the highest overall germination (97%). Pop corn had the highest weight per 1000 grains (161.23 g), and red cabbage had the lowest (3.27 g). Beetroot had the lowest germination energy value because the seed coat has a high content of germination inhibitors compared to other plant species. The minimum germination required to put beet seeds on the market is 65%. Radish seeds show the highest germination due to the low content of germination inhibitors and the shape of the seeds.

Key words: microvegetables, seed germination.

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