



Herbолошко друштво Srbije
Weed Science Society of Serbia

**XI KONGRES O KOROVIMA
I SAVETOVANJE O HERBICIDIMA
I REGULATORIMA RASTA**

11th WEED SCIENCE CONGRESS
AND SYMPOSIUM OF HERBICIDES
AND GROWTH REGULATORS

Zbornik rezimea
Book of Abstracts

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Izdavač:

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Ambrosia artemisiifolia L. (AMBEL) predstavlja veoma značajnu korovsku vrstu koja se na području Srbije nalazi u invaziji i čest je pratilac ruralnih i urbanih površina. Pri njenoj visokoj brojnosti prinosi useva mogu biti značajno umanjeni ili potpuno uništeni. Pored AMBEL u Srbiji, u Vojvodini, lokalno je prisutna i *Ambrosia trifida* L. (AMBTR). Imajući u vidu njen vegetativni i generativni potencijal može se očekivati njena ekspanzija. Polazeći od pretpostavke da bi u budućnosti distribucija AMBTR mogla da zauzme veće razmere nego sada, cilj ovog istraživanja fokusiran je na ispitivanje međusobne interakcije ove dve vrste ambrozija. Da bi utvrdili vegetativnu produkciju AMBEL u koasocijaciji sa AMBTR eksperiment je postavljen po dizajnu zamenjujućih serija (potpuno slučajan blok dizajn u četiri ponavljanja) u različitom odnosu biljaka AMBEL/AMBTR: 10/0; 8/2; 6/4; 4/6; 2/8; 0/10. Vegetativni parametri (visina, širina, broj listova, suva masa) mereni su tokom jula, avgusta i septembra (2016. godine), a svi rezultati analizirani su u statističkom paketu SPSS 23. Visina biljaka AMBEL kretala se u opsegu od 35,00-50,40 cm (jul), od 68,00-95,50 cm (avgust) i od 83,75-99,80 cm (septembar). Širina biljaka AMBEL tokom jula, avgusta i septembra kretala se u opsegu od 16,06-18,75 cm, od 23,00-25,42 cm i od 24,80-28,21 cm po istom redu ocena, dok su se kod parametra broja listova po biljci vrednosti kretale od 12,00-13,53 (jul), od 29,19-35,46 (avgust) i od 35,70-54,25 (septembar). Povećanje brojnosti AMBEL u odnosu na AMBTR uslovalo je i povećanje suve mase AMBEL po biljci. Vrednosti suve mase kretale su se u opsegu od 4,22-6,11 g (jul), od 8,96-10,27 g (avgust) i od 7,04-19,53 g (septembar). Minimalne vrednosti parametara zabeležene su u tretmanu sa 2, a maksimalne sa 10 biljaka AMBEL/m² što znači da je kod ove vrste ambrozije izraženija interspecijska nego intraspecijska kompeticija.

Ključne reči: kompeticija, dizajn zamenjujućih serija, *Ambrosia artemisiifolia*, *Ambrosia trifida*

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Motivations of citizen scientists to engage in projects on invasive alien species

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The ongoing transport and spread of alien species worldwide are among the distinguishing characteristics of the Anthropocene. Likewise, despite its long history,

citizen science (CS) is increasingly being recognized as a 21st century phenomenon. The critical mass of citizen scientists is evident by the steady increase in the number of projects depending on volunteer participation. The same is true of projects dealing with the problem of invasive alien species (IAS), which rely heavily on volunteers' help for the initial detection of new invaders and their subsequent control and eradication. However, despite their importance for the success of many CS IAS projects, little is known about the motivations guiding volunteers to participate in IAS projects. Consequently, the goal of this research was to uncover the main motivations leading volunteers to take part in IAS projects and thus ensure a better and more successful design of future IAS CS project initiatives. A meta-synthesis approach was used to search for, analyze and synthesize the results obtained from the selected publications. Relevant studies were searched for using multiple databases (Web of Science, Scopus, Google Scholar and Google), using a search string encompassing (through a set of relevant synonyms) the three relevant topics: motivations, citizen science and invasive alien species. Filtering of the resulting documents was performed on several levels, aiming to finally include only those studies with empirical evidence pertaining to the participants' motivations, leading to the final set of 27 relevant publications. A list of 202 statements pertaining to volunteer motivations was retrieved from the selected documents, and the listed motivations were further assigned to broader motivation categories using an iterative coding approach. The process of iterative categorization of the motivation statements yielded 16 different motivations affecting the participation of volunteers in IAS CS actions. These motivations have been further divided into those which are primarily environmental (supporting IAS management, helping the environment and protecting native species and habitats), those with a social connotation (social interaction, community responsibility and contribution to science) and those which are more personal (learning something new, personal and career development, feeling of accomplishment, health and wellbeing, enjoyment and fun). Some of the listed motivations are influenced by more than one aspect. For example, outdoor recreation, contact with nature and attachment to a particular place are motivations which refer to both a personal and an environmental aspect, while wanting to share existing knowledge and livelihood/food/income protection or opportunities are equally part of the social and personal aspect of motivations. An important outcome of this research is its recognition of previously unreported motivations, unique to IAS CS initiatives: 1) supporting invasive alien species (IAS) management, 2) protecting native species and habitats, and 3) livelihood/food/income protection or opportunities, as these aspects could be the cornerstones of future IAS CS project campaign.

Keywords: invasive alien species, citizen science, supporting invasive alien species management, protecting native species and habitats.

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