TR31043 **Proučavanje biljnih patogena, artropoda, korova i pesticida u cilju razvoja metoda bioracionalne zaštite bilja i proizvodnje bezbedne hrane**

	Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije
Vrsta projekta	Program tehnološkog razvoja
Trajanje projekta	2011-2014.
Koordinator projekta	Institut za pesticide i zaštitu životne sredine, Beograd
Realizatori projekta	Institut za pesticide i zaštitu životne sredine, Beograd; Agronomski fakultet, Čačak; Institut za zaštitu bilja i životnu sredinu, Beograd; Megatrend univerzitet – Fakultet za biofarming, Bačka Topola; Univerzitet Singidunum – Fakultet za primenjenu ekologiju Futura, Beograd; Poljoprivredni fakultet, Lešak
Rukovodilac projekta	Dr Dejan Marčić, naučni savetnik, Institut za pesticide i zaštitu životne sredine, Beograd
Broj istraživača	27
Tema i cilj projekta	Bioracionalni koncept zaštite bilja od štetnih agenasa (patogena, artropoda, korova) zasniva se na održivom upravljanju supstancama i/ili procesima koji, primenjeni u specifičnom agroekosistemu ili ekološkom kontekstu, deluju letalno ili inhibitorno na ciljni štetni agens, uz minimalne negativne efekte na neciljane organizme, životnu sredinu i čoveka. Ovako definisan koncept se realizuje integrisanjem različitih znanja i tehnologija – od rezultata proučavanja biologije štetnih vrsta i bioloških kontrolnih agenasa, načina funkcionisanja agroekosistema, bioloških efekata pesticida, preko razvoja pouzdanih metoda detekcije i identifikacije, precizne karakterizacije rezistentnosti,

	bezbednijih tehnologija formulisanja i aplikacije pesticida, do primene agrotehničkih, bioloških i alternativnih metoda kontrole štetnih organizama – u jedinstven sistem zaštite bilja. U okviru integrisanog sistema zaštite bilja centralno mesto pripada bioracionalnim pesticidima, proizvodima sintetskog i/ili prirodnog porekla, selektivnim i ekološki prihvatljivim jedinjenjima, kompatibilnim sa predatorima, parazitoidima i drugim biološkim kontrolnim agensima. Istovremeno, izbor između što većeg broja jedinjenja različitih mehanizama delovanja suštinski je značajan za definisanje strategije upravljanja rezistentnošću štetnih vrsta na pesticide. Uspostavljanjem integrisanog sistema ostvaruje se optimizacija primene pesticida, značajno se redukuju negativni efekti na životnu sredinu i dobija zdravstveno bezbedna hrana.
Odabrani publikovani rezultati	**MONOGRAFIJE, MONOGRAFSKE STUDIJE, TEMATSKI ZBORNICI ..... MEĐUNARODNOG ZNAČAJA (M10)** **<u>Monografska studija/poglavlje u knjizi M12 ili rad u tematskom zborniku međunarodnog značaja (M14)</u>** Đurović R., Đorđević T. (2011): Modern extraction techniques for pesticide residues determination in plant and soil samples. In: Pesticides in The Modern World (Stoytcheva M., ed.), InTECH, Rijeka, Croatia, pp. 221-246. Marčić D., Perić P., Milenković S. (2011): Acaricides – biological profiles, effects and uses in modern crop protection. In: Pesticides – Formulations, Effects, Fate (Stoytcheva M., ed.), InTECH, Rijeka, Croatia, pp. 37-62. Duduk B., Paltrinieri S., Lee IM., Bertaccini A. (2012): Nested PCR and RFLP analysis based on the 16S rRNA gene. Chapter 14. In: Phytoplasma – Methods and Protocols (Dickinson M., Hodgetts J., eds.), Springer, pp. 159-171. ISBN 978-1-62703-088-5 Potočnik I. (2012): Cultivated mushrooms: disease control in mushroom industry. In: Mushrooms: Types, Properties and Nutrition (Andres S., Baumann N., eds.), Nova Science Publishers, Inc., New York, USA, pp. 55-76. ISBN 978-1-61470-110-1 **RADOVI OBJAVLJENI U NAUČNIM ČASOPISIMA MEĐUNARODNOG ZNAČAJA** **<u>Rad u vrhunskom međunarodnom časopisu (M21)</u>** Marčić D., Petronijević S., Drobnjaković S., Prijović M., Perić P., Milenković S. (2011): The effects of spirotetramat on

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TR 20036 Razvoj i unapređenje bioracionalnih metoda zaštite bilja od bolesti i štetočina

	Ministarstvo za nauku i tehnološki razvoj Republike Srbije
Vrsta projekta	Program tehnološkog razvoja
Trajanje projekta	2008-2010.
Koordinator projekta	Institut za pesticide i zaštitu životne sredine, Beograd
Realizatori projekta	Institut za pesticide i zaštitu životne sredine, Beograd; Agronomski fakultet, Čačak; Megatrend univerzitet – Fakultet za biofarming, Bačka Topola; Univerzitet u Beogradu – Poljoprivredni fakultet, Beograd; Poljoprivredni fakultet, Lešak
Rukovodilac projekta	Dr Pantelija Perić, viši naučni saradnik, Institut za pesticide i zaštitu životne sredine, Beograd
Broj istraživača	21
Tema i cilj projekta	Istraživanja koja su obavljena u okviru ovog projekta imala su za cilj stvaranje uslova za razvoj ekološki prihvatljive i ekonomski održive zaštite bilja, odnosno proizvodnju kvalitetne i zdravstveno bezbedne hrane na otvorenom i u zaštićenom prostoru. U cilju stvaranja takvih uslova, potražena su alternativna rešenja, ekološki prihvatljiva i ekonomski održiva. Razvoj pesticide usmeren je ka uvođenju u primenu bioracionalnih jedinjenja, selektivnijih i bezbednijih za životnu sredinu. Intenzivirano je proučavanje korisne entomofaune, predatora i parazitoida štetnih vrsta, u cilju utvrđivanja potencijalno značajnih bioloških agenasa i njihove primene u biološkoj kontroli. Najznačajnija istraživanja u prethodnom period bila su: 1. Unapređenje zaštite bilja povrća i ukrasnog bilja u staklenicima i plastenicima od leptirastih vaši i grinja-paučinara, kroz karakterizaciju značajnih vrsta, izbor

	bioracionalnih pesticide i definisanje strategije kombinovanja pesticide i bioloških agenasa; 2. Unapređenje bioracionalnog pristupa kontroli biljnih vaši i lisnih buva u voćnjacima (konzervaciona biološka borba); 3. Uvođenje novih, efikasnijih metoda detekcije i identifikacije biljnih patogena u cilju sprečavanja njihovog unošenja i širenja prometom sadnog i semenskog materijala i pravovremenog sprovođenja mera suzbijanja; 4. Utvrđivanje rasprostranjenosti i distribucije karantinski štetnih mikroorganizama u cilju pronalaženja područja bez prisustva patogena za proizvodnju zdravog sadnog i semenskog materijala; 5. Unapređenje zaštite bilja od fitopatogenih mikroorganizama, karakterizacija značajnih vrsta, izbor bioracionalnih pesticide, bioloških agenasa i aktivatora otpornosti biljaka i definisanje strategije kombinovanja pesticide i bioloških agenasa.
Odabrani publikovani rezultati	**RADOVI OBJAVLJENI U NAUČNIM ČASOPISIMA MEĐUNARODNOG ZNAČAJA** **<u>Rad u vrhunskom međunarodnom časopisu (M21)</u>** Alvarez E., Mejia J.F., Liano G.A., Loke J.B., Calari A., Duduk B., Bertaccini A. (2009): Characterization of a Phytoplasma Associated with Frogskin Disease in Cassava. Plant Disease, 93, 1139-1145. Duduk B., Calari A., Paltrinieri S., Duduk N., Bertaccini A. (2008): Multigene analysis for differentiation of aster yellows phytoplasmas infecting carrots in Serbia. Annals of Applied Biology, 154, 219-229. Đorđević T., Šiler-Marinković S., Dimitrijević-Branković S. (2010): Effect of fermentation on antioxidant properties of some cereals and pseudo cereals. Food Chemistry, 119(3): 957-963. Tanović B., Ivanović M. (2010): First report of occurrence of benomyl resistance in *Botrytis cinerea* isolates on raspberry in Serbia. Plant Disease, 94(4): 486. **<u>Rad u istaknutom međunarodnom časopisu (M22)</u>** Hemnani K., O'Malley P.J., Tanović B.**,** Batzer J.C., Gleason M.L. (2008): First Report of Seven Species of Sooty Blotch and Flyspeck Fungi on *Asiminia triloba* in Iowa. Plant Disease, 92(9), 1366. DOI: 10.1094/PDIS-92-9-1366C. Marčić D., Ogurlić I., Mutavdžić S., Perić P. (2010): The effects of spiromesifen on life history traits and population growth of two-spotted spider mite (Acari: Tetranychidae). Experimental and Applied Acarology 50: 255-267. Potočnik I., Vukojević J., Stajić M., Rekanović E., Stepanović M., Milijašević S., Todorović B. (2010): Toxicity of biofungicide Timorex 66 EC to *Cladobotryum dendroides* and *Agaricus bisporus*. Crop Protection, 29 (3), 290-294.

Rad u međunarodnom časopisu (M23)

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Potočnik I., Vukojević J., Stajić M., Tanović B., Todorović B. (2008): Fungicide sensitivity of selected *Verticillium fungicola*

isolates from *Agaricus bisporus* farms. Archives of Biological Sciences, 60(1), 151-158.

Tanović B., Potočnik I., Delibašić G., Ristić M., Kostić M., Marković M. (2009): *In vitro* effect of essential oils from aromatic and medicinal plants on mushroom pathogens: *Verticillium fungicola* var. *fungicola*, *Mycogene perniciosa*, and *Cladobotryum* sp. Archives of Biological Science, 61(2), 231-237.

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ZBORNICI MEĐUNARODNIH NAUČNIH SKUPOVA (M30)
Saopštenje sa međunarodnog skupa štampano u celini (M33)

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Duduk B., Ivanović M., Paltrinieri S., Bertaccini A. (2008): Phytoplasmas Infecting Fruit Trees in Serbia. Proceedings XX International Symposium on Virus and Virus-Like Diseases of Temperate Fruit Crops – Fruit Tree Diseases, Antalya, Turkey – Acta Horticulturae, 781, 351-358.

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Marčić D., Perić P., Prijović M., Ogurlić I., Andrić G. (2008): Chemical control of *Cacopsylla pyri* L. in Serbian pear orchards using biorational insecticides. Proceedings 10th International Pear Symposium, Peniche, Portugal – Acta

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Milijašević S., Todorović B., Rekanović E., Stepanović M. (2009): Occurence of bacterial canker of tomatoes in southern Serbia. Proceeding IInd International Symposium on Tomato Diseases, Kusadasi, Turkey – Acta Horticulturae, 808: 307-377.

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Tanović B., Rekanović E., Potočnik I., Todorović B. (2008): Effectiveness of fungicides and biofungicides in the control of grey mould of raspberry in Serbia. Proceedings IXth International Rubus and Ribes Symposium, Pucon, Chile – Acta Horticulturae, 777(I): 339-343.

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TR 20041 Biološka, hemijska, toksikološka i ekotoksikološka proučavanja herbicida i njihova primena

	Ministarstvo za nauku i tehnološki razvoj Republike Srbije
Vrsta projekta	Program tehnološkog razvoja
Trajanje projekta	2008-2010.
Koordinator projekta	Institut za pesticide i zaštitu životne sredine, Beograd
Realizatori projekta	Institut za pesticide i zaštitu životne sredine, Beograd; Poljoprivredni fakultet, Beograd; Institut za zaštitu bilja i životnu sredinu, Beograd
Rukovodilac projekta	Dr Vaskrsija Janjić, naučni savetnik, Institut za pesticide i zaštitu životne sredine, Beograd
Broj istraživača	17
Tema i cilj projekta	Predmet ovih istraživanja bile su korovske biljke i herbicidi koji se koriste za njihovo suzbijanje. Korovske biljke ne samo u našoj zemlji nego i u celom svetu predstavljaju ogroman problem u biljnoj proizvodnji. Istraživanja koja su bila predmet ovog projekta doprinela su upoznavanju stepena efikasnosti i spektra delovanja, selektivnosti u odnosu na gajene biljke, stabilnosti i ponašanja u zemljištu, ispiranja u dublje slojeve i podzemne vode, stepena stvaranja rezistentnih korovskih biljaka, toksikološkog i ekotoksikološkog delovanja na korisne organizme (mikroorganizme u zemljištu).

Odabrani publikovani rezultati

RADOVI OBJAVLJENI U NAUČNIM ČASOPISIMA MEĐUNARODNOG ZNAČAJA

Rad u vrhunskom međunarodnom časopisu (M21)

Tomašević A., Kiss E., Petrovic S., Mijin D. (2010): Study on the photocatalytic degradation of insecticide methomyl in water. Desalination, 262: 228-234.

Rad u istaknutom međunarodnom časopisu (M22)

Brkić D., Vitorović S., Gašić S., Nešković N. (2008): Carbofuran in Water: Subchronic Toxiticity to Rats. Environmental Toxicology and Pharmacology, 25: 334-341.

Đurović R., Gajić Umiljendić J., Cupać S., Ignjatović Lj. (2010): Solid phase microextraction as an efficient method for characterization of the interaction of pesticides with different soil types. Journal of the Brazilian Chemical Society, 21(6): 985-994.

Tomašević A., Mijin D., Kiss E. (2010): Photochemical behavior of the insecticide methomyl under different conditions. Separation Science and Technology, 45: 1617-1627.

Rad u međunarodnom časopisu (M23)

Đurović R., Đorđević T., Šantrić Lj., Gašić S., Ignjatović Lj. (2010): Headspace solid phase microextraction method for determination of triazine and organophosphorus pesticides in soil. Journal of Environmental Science and Health, Part B, 45(7): 626-632.

Lázár K., Tomašević A., Bošković G., Kiss E. (2009): Comparison of FeAlPILC and Fe-ZSM-5 catalysts used for degradation of methomyl. Hyperfine Interactions, 192: 23-29.

Nikolić B., Dodig D., Jovanović V., Janjić V., Đurović S. (2008): Effects of temperature and light induction of Chl a fluorescence in situ: an ecophysiological view. Archives of Biological Sciences, 60(4): 567-572.

Radivojević Lj., Gašić S., Šantrić Lj., Stanković-Kalezić R. (2008): The impact of atrazine on several biochemical propertes of chernozem soil. Journal of Serbian Chemical Society, 73(10): 951-959.

Stanković-Kalezić R., Radivojević Lj., Janjić V., Šantrić Lj., Malidža G. (2008): A new association of ruderal weeds at Pančevački rit in Serbia. Helia, 31(49): 35-44.

Tomašević A., Avramov-Ivić M., Petrović S., Jovanović M., Mijin D. (2009): A study of the electrochemical behaviour of methomyl on a gold electrode in a neutral electrolyte. Journal of the Serbian Chemical Society, 74(5): 573-579.

ZBORNICI MEĐUNARODNIH NAUČNIH SKUPOVA (M30)
Saopštenje sa međunarodnog skupa štampano u celini (M33)

Kuburović N., Golubović A., Todorović Ž., Gašić S., Solević T. (2009): Photocatalytic degradation of wastewater polluted by methyl-tertiary-butyl-ether using titanium-dioxide and doped titanium-dioxide. Proceedings 4th IASME/WSEAS International Conference on Water Resources, Hydraulics & Hydrology, Cambridge, UK, 19-24.

Tomašević A., Mijin D., Kiss E. (2009): Photochemical behavior of the insecticide methomyl under different conditions. Proceedings 2nd European Conference on Environmental Applications of Advanced Oxidation Processes, Nicosia, Greece, 1-6.

TR 20060 **Optimizacija primene aktuelnih i istraživanje novih fungicida i zoocida u funkciji njihove efikasnosti i bezbednosti hrane**

	Ministarstvo za nauku i tehnološki razvoj Republike Srbije
Vrsta projekta	Program tehnološkog razvoja
Trajanje projekta	2008-2010.
Koordinator projekta	Institut za pesticide i zaštitu životne sredine, Beograd
Realizatori projekta	Institut za pesticide i zaštitu životne sredine, Beograd; Poljoprivredni fakultet, Beograd; Institut za nuklearne nauke Vinča, Beograd
Rukovodilac projekta	Dr Petar Kljajić, viši naučni saradnik, Institut za pesticide i zaštitu životne sredine, Beograd
Broj istraživača	11
Tema i cilj projekta	Istraživanja u okviru ovog projekta su bila usmerena na utvrđivanje nivoa osetljivosti populacija značajnih štetnih organizama (biljni patogeni, štetni insekti, glodari i puževi) prema aktuelnim fungicidima i zoocidima (insekticidi, rodenticidi, moluskocidi) i optimizaciju primene ovih pesticida, kao nastavak započete reevaluacije preparata na bazi različitih aktivnih materija i njihovih kombinacija formulisanih u različitim oblicima. Posebna pažnja je bila posvećena onim aktivnim materijama i preparatima koji se duže vreme primenjuju u zaštiti bilja i uskladištenih žita u Srbiji. Istovremeno, istraživanja su bila usmerena i na ispitivanja upotrebljivosti novih fungicida i zoocida za različite namene, posebno kod onih populacija štetnih organizama kod kojih je utvrđena promenjena osetljivost/rezistentnost na korišćene aktivne materije.

Pored ispitivanja biološke efikasnosti u različitim uslovima, utvrđivan je i uticaj pripreme fungicida i zoocida za primenu i način njihove aplikacije različitim mašinama i uređajima, na ukupnu efektivnost različitih fungicida i zoocida i/ili njihovih kombinacija. Sa ciljem dobijanja kvalitetne i bezbedne hrane za ljude i domaće životinje, sagledan je značaj svežih depozita i ostataka aktivnih materija fungicida i insekticida kod odabranih biljnih proizvoda značajnih za tržište hrane u našoj zemlji i svetu.

Odabrani publikovani rezultati

RADOVI OBJAVLJENI U NAUČNIM ČASOPISIMA MEĐUNARODNOG ZNAČAJA

Rad u vrhunskom međunarodnom časopisu (M21)

Kljajić P., Andrić G., Adamović M., Bodroža-Solarov M., Marković M., Perić I. (2010): Laboratory assessment of insecticidal effectiveness of natural zeolite and diatomaceous earth formulations against three stored-product beetle pests. Journal of Stored Products Research, 46: 1-6.

Kljajić P., Perić I. (2009): Residual effects of deltamethrin and malathion on different populations of *Sitophilus granarius* (L.) on treated wheat grains. Journal of Stored Products Research, 45, 45-48.

Rad u istaknutom međunarodnom časopisu (M22)

Marković M., Cupać S., Đurović R., Milinović J., Kljajić P. (2010): Assessment of heavy metal and pesticide levels in soil and plant products from agricultural area of Belgrade, Serbia. Archives of Environmental Contamination and Toxicology, 58(2): 341-351.

ZBORNICI MEĐUNARODNIH NAUČNIH SKUPOVA (M30)

Predavanje po pozivu sa međunarodnog skupa štampano u celini (M31)

Kljajić P., Andrić G. (2010): Physical measures for storage insects control. Proceedings of XIV International Symposium Feed Technology, Novi Sad, Serbia, 168-182.

Saopštenje sa međunarodnog skupa štampano u celini (M33)

Andrić G., Kljajić P., Adamović M., Pražić Golić M. (2010): Susceptibility of Red flour beetle *Tribolium castaneum* (Herbst) populations from Serbia to contact insecticides. Proceedings 10th International Working Conference on Stored Product Protection, Estoril, Portugal, 868-872.

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Vukša M., Jokić G., Đedović S. (2009): IPM strategy for rodent control in alfalfa crops. 9th International Symposium Modern trends in Livestock Production – Biotechnology in Animal Hausbandry, 25(5-6), 1241-1248.

TEHNIČKA I RAZVOJNA REŠENJA (M80)

Bitno poboljšan tehnološki postupak (M84)

Kljajić P., Andrić G., Adamović M., Stojanović M., Marković M. (2010): ZeoStor – prašivo na bazi prirodnog zeolita namenjeno zaštiti uskladištenog žita od štetnih insekata. Priznat Odlukom Ministarstva nauke i tehnološkog razvoja RS, 2010.

TR 6868B Istraživanja u cilju razvoja novih i poboljšanih postojećih formulacija herbicida

	Ministarstvo nauke Republike Srbije
Vrsta projekta	Program tehnološkog razvoja
Trajanje projekta	2005-2008.
Koordinator projekta	Institut za pesticide i zaštitu životne sredine, Beograd
Realizatori projekta	Institut za pesticide i zaštitu životne sredine, Beograd; Poljoprivredni fakultet, Beograd; Institut za zaštitu bilja i životnu sredinu, Beograd
Rukovodilac projekta	Dr Vaskrsija Janjić, naučni savetnik, Institut za pesticide i zaštitu životne sredine, Beograd
Broj istraživača	14
Tema i cilj projekta	Cilj ovih istraživanja je bio iznalaženje novih i poboljšanje postojećih formulacija herbicida za racionalnu i bezbednu primenu u suzbijanju najzastupljenijih korova u usevima najvažnijih gajenih biljaka u Srbiji. Na osnovu ispitivanja biologije korovskih biljaka, kao i fizičko-hemijskih, toksikoloških i ekotoksikoloških svojstava novih i poboljšanih formulacija herbicida, a posebno na osnovu ispitivanja njihove efikasnosti u različitim klimatskim i zemljišnim uslovima trebalo je utvrditi uslove za njihovu primenu u praksi, što obezbeđuje smanjivanje šteta koje korovi pričinjavaju i optimalno iskorišćavanje genetskog potencijala gajenih biljaka. Posebno je potrebno razraditi metode za suzbijanje nekih korovskih biljaka za koje nisu postojala dobra rešenja, kao i iznalaženje herbicida za suzbijanje ambrozije.

Odabrani publikovani rezultati	**RADOVI OBJAVLJENI U NAUČNIM ČASOPISIMA MEĐUNARODNOG ZNAČAJA** **<u>Rad u međunarodnom časopisu (M23)</u>** Božić D., Vrbničanin S., Barać M., Stefanović L. (2007): Determination of johnsongrass [*Sorghum halepense* (L.) Pers.] level of sensibility to nicosulfuron. Maydica, 52: 271-275. Milivojević D., Nikolić B., Drinić G. (2006): Effects of arsenic on phosphorus content in different organs and chlorophyll fluorescence in primary leaves of soybean. Biologia Plantarum, 50(1): 149-151. Oljača S., Vrbničanin S., Simić M., Stefanović L., Dolijanović Ž (2007): Jimsonweed (*Datura stramonium* L.) interference in maize. Maydica, 52: 329-333. Pavlović D., Vrbničanin S., Božić D., Simončič A. (2007): The study of methods for determination of metabolism based resistance of *Abutilon theophrasti* Medic. to atrazine. Journal Central European Agriculture, 8(4): 435-442. Stanković-Kalezić R., Kojić M., Vrbničanin S., Radivojević Lj. (2007): *Helianthus annuus* – a new important element of the non-arable and arable flora in Serbia's region of southern Banat. Helia, 30(46): 37-42. **ZBORNICI MEĐUNARODNIH NAUČNIH SKUPOVA (M30)** **<u>Saopštenje sa međunarodnog skupa štampano u celini (M33)</u>** Marisavljević D., Pavlović D., konstantinović B., Meseldžija M. (2006): Testing possibilities for chemical control of *Iva xanthifolia* in soybean. 23rd German Conference on Weed Biology and Weed Control, Germany – Journal of Plant Disease and Protection, XX: 727-731. Pavlović D., Vrbničanin S., Elezović I., Jovanović Lj., Marisavljević D. (2006): Alternations in amount of chlorophyll as indicator of resistance for *Chenopodium album* L. and *Amaranthus retroflexus* L. to atrazine. 23rd German Conference

on Weed Biology and Weed Control, Germany – Journal of Plant Disease and Protection, XX: 131-138.

Radivojević Lj., Stanković-Kalezić R., Pavlović D., Marisavljević D. (2006): Efficacy of several herbicides in controlling weeds in wheat. 23rd German Conference on Weed Biology and Weed Control, Germany – Journal of Plant Diseases and Protection, XX: 787-793.

TR 6890B **Razvoj i usavršavanje fungicida i zoocida u cilju njihove racionalne primene**

	Ministarstvo nauke Republike Srbije
Vrsta projekta	Program tehnološkog razvoja
Trajanje projekta	2005-2008.
Koordinator projekta	Institut za pesticide i zaštitu životne sredine, Beograd
Realizatori projekta	Institut za pesticide i zaštitu životne sredine, Beograd; Poljoprivredni fakultet, Beograd
Rukovodilac projekta	Dr Petar Kljajić, viši naučni saradnik, Institut za pesticide i zaštitu životne sredine, Beograd
Broj istraživača	23
Tema i cilj projekta	Cilj istraživanja je razvoj novih i usavršavanje postojećih formulacija fungicida i zoocida (insekticida, akaricida i rodenticida) i ispitivanje mogućnosti njihove primene u suzbijanju biljnih patogena i štetočina, kao i štetočina značajnih u javnoj higijeni. Proučavanje biologije štetnih organizama, preliminarna testiranja bioloških efekata i ispitivanje biološke efikasnosti novih i preispitanih postojećih formulacija pesticida u različitim uslovima praktične primene, sprovode se radi utvrđivanja parametara značajnih za optimalnu, ekološki i ekonomski opravdanu primenu pesticida u zaštiti bilja i javnoj higijeni. Karakterizacija fizičko-hemijskih osobina fungicida i zoocida, kao i praćenje njihove razgradnje u/na biljkama i biljnim proizvodima treba da omoguće preciznije definisanje poslednjih rokova primene (karenci). Rezultati ovih istraživanja treba da doprinesu stvaranju osnove za racionalnu primenu bilja i biljnih proizvoda i

efikasno suzbijanje štetnih organizama značajnih u javnoj higijeni. Poznavanje biologije štetnih organizama i efekata novih formulacija omogućava redefinisanje postojećih programa zaštite bilja, odnosno racionalniju primenu fungicida i zoocida. Redukcija broja tretiranja i upotrebljenih količina pesticida, kao i preispitivanje rokova primene smanjuje rizik od ostataka u biljkama i biljnim proizvodima i zagađenja životne sredine. Optimalizacija primene fungicida i zoocida značajno snižava troškove zaštite bilja i obezbeđuje ekološki prihvatljivu poljoprivrednu proizvodnju.

Odabrani publikovani rezultati

RADOVI OBJAVLJENI U NAUČNIM ČASOPISIMA MEĐUNARODNOG ZNAČAJA

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