8th International Weed Science Congress 2022 Student Paper Contest Winners, First Tier

Nineteen students, out of 74 applicants, were selected for the IWSS Travel Grant Award to attend the 8th IWSC this December 4 – 10, 2022 in Bangkok, Thailand. This award is co-sponsored by the International Weed Science Society (IWSS), Weed Science Society of America (WSSA) and the Brazilian Weed Science Society (BWSS).

Chengsong Hu, under the guidance of Dr. Muthu Bagavathiannan from Texas A&M University, USA won the most coveted **Larry Burrill Award**. This award recognizes the most outstanding paper submitted and covers all travel expenses.

In addition to financial support, the top five students will also receive a plaque and a certificate. All other winners will receive a certificate.

Considering that these papers were submitted for the Congress that was originally scheduled in 2020, the status of many students has already changed. Therefore, several students could no longer attend the Congress, leaving available slots to sponsor additional students with qualifying scores. Additional travel grant winners will be announced as soon as information on ability to attend the Congress is finalized.

The selection committee who dedicated many hours reviewing and evaluating the manuscripts include:

- Dr. Bernal Valverde, Costa Rica Chair
- Dr. Gregory MacDonald, USA Weed Science Society of America representative
- Dr. Caio Carbonari, Brazil Brazilian Weed Science Society representative
- Dr. Aurora Baltazar, Philippines Representative of Asia
- Dr. Husrev Mennan, Turkey European Weed Science Society representative

Last name	First name	Nationality	Institution (Country)	Graduate level	Research Paper	Major Professor
Hu	Chengsong	China	Texas A&M University (USA)	PhD	Semantic segmentation of air-borne weed imagery using ground-borne synthetic data	Muthu Bagavathiannan
Sapkota	Bishwa	Nepal	Texas A&M University (USA)	PhD	Using unmanned aerial systems for early prediction of the competitive interactions of Italian ryegrass in wheat	Muthu Bagavathiannan
Perez	Loida M.	Philippines	Mississippi State University (USA)	PhD	Unravelling 2,4-D tolerance in interspecific chromosome substitution lines of upland cotton, <i>Gossypium</i> <i>hirsutum</i> L.	Te-Ming Paul Tseng
Maity	Aniruddha	India	Texas A&M University (USA)	PhD	Herbicide resistance correlates with seed dormancy and seed biomass in Italian ryegrass (Lolium multiflorum)	Muthu Bagavathiannan
Noguera	Matheus	Brazil	University of Arkansas (USA)	PhD	Target site mutation accumulation in PPO-inhibitor-resistant <i>Amaranthus</i> <i>palmeri</i> is difficult, but not impossible	Nilda Roma-Burgos
Velásquez Rodríguez	Juan Camilo	Brazil	Universidade Federal de Pelotas (BRAZIL)	MS	Selectivity of florpyrauxifen-benzyl to paddy rice under variable temperature conditions and P-450 inhibitors	Luis Antonio de Avila
Gadri	Yaron	Israel	Hebrew University of Jerusalem (ISRAEL)	PhD	Genetic improvement root early vigor promotes mechanical weed management in sesame	Zvi Peleg
Nehurai	Omer	Israel	Newe Ya'ar Research Center/The Hebrew University of Jerusalem (ISRAEL)	MS	Early detection of glyphosate effect on Solanum nigrum L. using hyperspectral sensor and machine learning	Ran Lati
Rigon	Carlos A.	Brazil	Colorado State University (USA)	PhD	Recurrent selection with herbicide mixture decreases <i>Echinochloa crus</i> -	Todd Gaines

List of IWSS Travel Grant winners for 8th IWSC 2022, Bangkok, Thailand, December 4 – 10, 2022.

					<i>galli</i> control and increase the expression of detoxication genes	
Fuller	Mary G.	USA	Mississippi State University (USA)	MS	Screening of chromosome substitution (CS) cotton lines for weed-suppressing potential	Te-Ming Paul Tseng
Noh	Tae-Kyeong	Korea	Seoul National University (KOREA)	MS	Diagnosis of herbicide activity and mode of action using spectral image analysis	Do-Soon Kim
Zia Ul Haq	Muhammad	Pakistan	Nanjing Agricultural University (CHINA)	PhD	Ethylene biosynthesis inhibition combined with cyanide degradation confers to quinclorac resistance in Echinochloa crus-galli var. mitis	Sheng Qiang
Fipke	Marcus	Brazil	Universidade Federal de Pelotas (BRAZIL)	PhD	Stress memory mechanism involved in increasing tolerance of <i>Eragrostis plana</i> to glyphosate herbicide	Luis Antonio de Avila
Kim	Harim	Korea	Seoul National University (KOREA)	MS	Baseline sensitivity of <i>Echinochloa</i> spp. to florpyrauxifen-benzyl in Korea	Do-Soon Kim
Samuelson	Spencer	USA	Texas A&M University (USA)	PhD	Influence of 26 late summer- and fall- planted cover crops on weed density and soil moisture dynamics in Southeast Texas	Muthu Bagavathiannan
Cutti	Luan	Brazil	Universidade Federal do Rio Grande do Sul (BRAZIL)	PhD	Negative cross-resistance to clomazone in <i>Echinochloa crus-galli</i> resistant to imidazolinone herbicides caused by increased metabolization	Aldo Merotto Junior
Braga	Andreísa	Brazil	São Paulo State University, UNESP (BRAZIL)	PhD	Weed resistance identification potential by NIR spectroscopy	Pedro Luis da Costa Aguiar Alves
Iqbal	Iram Mujahid	Pakistan	University of the Punjab (PAKISTAN)	PhD	Discrimination and mapping of invasive weeds in protected areas of Pakistan using remote sensing	Firdaus-e-Bareen