

CURRICULUM VITAE

Nicholas E. Korres

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Education

Postgraduate Diploma in Operational Research & Applied Statistics

University of Salford (UK)

September 2004-July 2006

Course modules: Applied Statistics, Stochastic Processes, Forecasting, Bayesian Inference, Applied Mathematical Programming, Management Science, System Dynamics & Simulation, Decision Making Procedures.

PhD in Weed Science

University of Reading (UK)

September 1995-March 2000

Thesis Title: "The effects of seed rate and varietal selection on weed suppression and herbicide sensitivity in winter wheat (*Triticum aestivum* L.)".

A series of field experiments in a split-plot arrangement integrating six winter wheat cultivars of contrasting growth habit, three seeding rates and three weed management treatments were conducted to investigate i) the physiology of crop-weed competition, ii) the effects of weed competition on final yield and yield components (qualitative and quantitative) and iii) weed biology, phenology and population dynamics. Greenhouse experiments and bioassays were conducted to investigate herbicide phytotoxicity on winter wheat.

MSc in Crop Physiology

University of Reading (UK)

September 1994-August 1995

Dissertation Title: The effects of growth retarding chemicals on growth of *Zea mays* L.

BSc in Plant Production-Agronomy

Technological Education Institute-Larisa. Currently: University of Thessaly (GR): September 1988-December 1993

Project Title: **Chemical control** of three *Armillaria*'s spp. biotypes in seven potential tree hosts under controlled environmental conditions.

Professional Experience

Associate Professor

Dept. of Agriculture, University of Ioannina, Greece

January 2022-Present

Research is focused on the Optimization of Production Systems and Precision Agriculture in Row Crops (incl. cereals, maize, potatoes, aromatic & pharmaceutical plants, vegetables, and energy crops), Weed Management (Integrated Weed Control, Herbicide Resistance, Weed Ecology and Biology, Weed Physiology), Integrated Food and Energy Systems and Climate Change/ Plant Response to Abiotic Stress.

ORISE Established Scientist Fellow [Plant Ecology]

Global Change Photosynthesis Research Unit-USDA-ARS

June 2019-August 2021

- **Job description/Projects:** To elucidate weed/crop biology and ecology in cropping systems; to understand mechanisms driving risks in cropping systems; to forecast the consequences of variability and global change on cropping systems. Projects involved:
- */** **Snap bean** weed survey in in **collaboration** with **Oregon** and **Wisconsin** State Universities and **industry processors (Del Monte and Seneca Foods)**.
- */**Post-harvest weed seed retention in **sweet corn**.

- ***/**Use of mathematical and statistical models** to synthesize empirical results and provide insights from observational data in order to guide the design of future experiments and analyses.
 - Preparation and submission of research proposals: NIFA-AFRI PKG00257195, Program Area Priority Code: A1152, Foundational Knowledge of Agricultural Production Systems; Proposal number 2020-04362.
 - **Administrative tasks**
 - **Organizing and conducting interviews and recruiting** undergraduate research assistants for summer internship vacancies.
 - Supervising undergraduate students to perform daily lab tasks.
 - **Accomplishments**
- Eleven papers (seven published, four under review) and one book chapter. Additionally, one book and two book chapters under review.

Research Associate

University of Arkansas, USA

February 2014-May 2019

Research projects include:

- ******New technologies and Herbicide Resistance**
 1. Effects of simulated **2,4-D** and **Dicamba tank contamination** on **Roundup Ready 2** and **Xtend soybean** (small-scale field experiment).
- *****Herbicide Resistance and Dose Response Curves**
 1. Acetyl CoA Carboxylase on *Leptochloa panicoides* (Amazon sprangletop).
 2. Protoporphyrinogen oxidase inhibiting herbicides resistance in *Amaranthus palmeri* (Palmer amaranth).
 3. Acetyl CoA Carboxylase herbicide performance on winter wheat and diclofop herbicide resistant *Lolium multiflorum* (Italian ryegrass)
 4. Glyphosate efficacy on ALS-inhibiting herbicide-resistant *Cyperus esculentus* (yellow nutsedge).
 5. Chlorophyll fluorescence technique as a rapid diagnostic test on the effects of photosynthetic inhibitor chlorotoluron on two winter wheat cultivars.
- ******Integrated Weed Management and Cropping Systems**
 1. Influence of long-term **harvest weed seed control (narrow-windrow burning)**, **cover crops** (cereal rye) and **crop rotation (corn-soybean)** on dynamics of naturally occurring weed flora (large-scale field experiment) (USDA-NIFA-AFRI- Wide-Area).
 2. Population dynamics of naturally occurring weed flora response to **HPPD-inhibitor herbicides in soybean, maize and cotton** (large-scale field experiment) (Industry).
 3. Seedbank and population dynamics of johnsongrass control in **grain sorghum** (large-scale field experiment) (NIFA-AFRI).
 4. Long-term effects of narrow-windrow burning and cover crops on Palmer amaranth in **wide-row soybean** (large-scale experiment) (US Soybean Board).
 5. Effects of cover crops (cereal rye) termination timing under various herbicide programs on naturally occurring weed flora in **wide-row soybean** (USDA-NIFA-Wide Area).
 6. Evaluation of long-term harvest weed seed control and post-harvest tactics on Italian ryegrass seedbank dynamics in **rainfed winter wheat** (NIFA-AFRI).
 7. Effects of soybean **density** on Palmer amaranth **population dynamics, biology and phenology in drill-seeded soybean** (small-scale field experiment) (US Soybean Board).
 8. Effects of weed-free interval period on Palmer amaranth biological and phenological characteristics and crop yield in **wide-row soybean** (small scale field experiment) (US Soybean Board).
- **** Weed ecophysiology**
 1. Effects of plant density on Palmer amaranth biological and **demographic** characteristics using **life table analysis** in wide-row soybean (small-scale field experiment).
 2. Effects of **abiotic stress** on Palmer amaranth gender **photochemistry, growth and phenology** (greenhouse and growth chamber experiments).
 3. **Fitness cost** of Palmer amaranth, Johnsongrass (*Sorghum halepense*), red rice (*Oryza sativa*), barnyardgrass (*Echinochloa crus-gali*), yellow nutsedge (*Cyperus esculentus*) and ryegrass (*Lolium perenne*) herbicide susceptible and resistant ecotypes (small-scale field experiment).

4. **Weed seed physiology and germination** (in conjunction with fitness cost field experiment) (growth chamber experiment).
 - ***/** Weed biology and phenology**
 1. **Seed retention** of various broadleaf and grass weed species in soybean (USDA Wide-Area).
 2. Effects of Palmer amaranth emergence date and inter-row distance on weed biology and **flowering** in wide-row soybean (small scale field experiment) (US Soybean Board).
 3. Effects of Palmer amaranth density on **flowering initiation** and **development** in wide-row soybean (small scale field experiment) (US Soybean Board).
 4. Exploring the **dioecious** nature of Palmer amaranth under **abiotic stress**.
 - **Weed Ecology: Weed and Soil Surveys and Big Data Development-Analysis**
 1. ****Weed surveys**
 - **Big database** development (i.e., over one million records from Mississippi river Delta area, eastern Arkansas weed survey).
 - **Data filtering** and analysis for the determination of the factors that affect **weed occurrence** and **distribution in field margins** and adjacent **ditches** across roadsides in Mississippi Delta river area, eastern Arkansas.
 2. ****Soil surveys**
 - To examine the relationships between weed occurrence and **soil properties** in the field margins and adjacent ditches in Mississippi Delta river area, eastern Arkansas.
 - Soil samples were collected from sampling sites across the borders of Arkansas with Mississippi, Tennessee and Louisiana.
 - **Soil physical**, soil **chemical** properties and soil **extractable soil nutrients** were related to weed occurrence.
 - **Mapping weed species distribution** using **GIS** technology.
 3. ***Seedbank persistence**. Investigation of weed seedbank persistence as affected by burial period and depth across seven US States with diverse climatic and topographical characteristics (US Soybean Board).
 - ***Climate change effects on crop and weeds**
 1. A series of desk studies investigating the effects of climate change on crop (physiology and yield) and weeds (physiology and yield). Short and long-term adaptation and mitigation options on both cropping system and weed management tactics are suggested. Several review papers and book chapters have already been published.
 - ***Database Knowledge Discovery**
 1. Acquiring (and using) data from the USDA Web Soil Survey to assess dynamic soil properties and soil changes in Mississippi Delta area-eastern Arkansas.
 2. Mapping weed distribution at roadsides and field margins across Mississippi Delta area in eastern Arkansas.
 3. Application of life table analysis and weed demographics.
 4. Integration of ground cover (image analysis) and interception of solar radiation in weed ecophysiological studies.
 5. Meta-data analysis to assess herbicide efficacy evaluation methods.
 6. Determination of the critical period for weed control through the application of non-linear regression models i.e. **Gompertz** and **logistic regression analysis**.
 7. **Stepwise regression** for the analysis of data related with **harvest weed seed control** treatments and **fall management** practices for the control of herbicide resistant weeds.
 8. Comparison of herbicide **dose response curves**.
 - ****Simulation Modelling/Metadata Analysis**
 1. **System dynamics** using **STELLA** software: Modelling the evolution of herbicide resistance under various **weed management** and **cropping systems**.
 - a. **Database development** (based on field experiments) for simulation runs under completion.
 2. **Herbicide efficacy evaluation**.
 - **Administrative tasks**
 - Mentoring three graduate students.

- Assist graduate students (one to one consultation) with statistical analysis and report preparation.
- Invigilating exams and grading tests.

• Accomplishments

One book, **twenty-two** peer-reviewed papers (eleven as first author), **twenty-five** conferences abstracts (9 oral presentations), **one** technical report and **eight** book chapters (six as first author).

Senior Editor

Science Publishers, CRC Press/Taylor and Francis Pub. Co. *January 2016-December 2018*

***Senior Editor** for the completion of a book entitled "**Weed Control: Sustainability, Hazards and Risks in Cropping Systems Worldwide**". Hundred fifty experts from nineteen countries have contributed into this project either as chapter authors or chapter reviewers. Weed control methods in **twenty-five crops/cropping systems** worldwide are critically reviewed. In addition, important issues (e.g. transgenic crops, allelopathy, bioherbicides, herbicide resistance evolution, effects of herbicides on various ecosystems etc.) of Weed Science are analysed in detail. (<https://www.amazon.com/Weed-Control-Sustainability-Cropping-Worldwide/dp/1498787460>)

Agribusiness Consultant

v. Attis Business Consulting Ltd, GR *January 2013-December 2013*

- ****Integrated Agricultural and Energy production Systems**
- ****Life Cycle Assessment** of crops and cropping systems.
- ****Bioenergy production.**

Senior Editor

EarthScan from Routledge/Taylor & Francis Publishing Group *October 2010-April 2013*

Senior Editor for the completion of the book entitled "Bioenergy Production by Anaerobic Digestion: Using Agricultural Biomass and Organic Waste" Thirty-five experts contributed as chapter authors and 28 as reviewers. (<http://www.routledge.com/books/details/9780415698405/>). The book **was re-published**, as paperback, on August 14, 2018.

Scientific Advisor

Agricultural University of Athens, GR *April 2010-September 2010*

Life Cycle Assessment of bioethanol production from sweet sorghum

Senior Research Fellow (Agronomy)

Environmental Research Institute - University College Cork, Ireland *October 2008-May 2010*

Main job tasks and projects:

- **Life Cycle Assessment** of **grass silage**-biomethane production and development of **Life Cycle Inventory** and Meta-Data analysis with emphasis on:
 - Grassland operational inputs
 - **Fertilization management** and related fertilization emissions
 - **N-Cycle analysis**
 - **Carbon sequestration**
 - **Herbicides and herbicides emission due to volatilization**
 - Examination of various **adaptation and mitigation options** (sensitivity analysis) for the evaluation of product sustainability
 - Energy inputs and related **GHG emissions**
- **Administrative tasks**
 - Mentor to four PhD students
 - Organization of a conference/workshop for knowledge transfer and capacity building
 - Development of conference flier and conference press release
 - Communication of the research findings to media and other stakeholders
 - Website development
 - Member of the University expert's team in statistics and agronomy.

• Accomplishments

Nine peer-reviewed journal papers, **one** book chapter, **four** conference papers and **one** technical report.

Research Fellow

Agricultural University of Athens, GR

September 2007-March 2008

****Author** for the compilation of a manual entitled “**Evaluation of potential energy crops**” (for farmers, investors and scholars in renewable energy, policy makers and agronomists). Twenty potential energy crops classified as **starchy** (wheat, corn, grain sorghum and barley), **oil** (oilseed rape, sunflower, jatropha and castor oil), **sugar** (sugar beet, sweet sorghum), **biomass** (switchgrass, miscanthus, reeds, artichoke thistle, fiber sorghum, kenaf) and **short rotation coppice** (poplar, willow, eucalyptus, black locust) crops were extensively analyzed in terms of:

- **Crop ecophysiology**
- **Crop establishment and husbandry**
- **Crop protection** (incl. **weed control**)
- **Harvesting and post-harvest management/storage**
- **SWOT** (strengths, weaknesses, opportunities and threats) analysis
- **Energy potential and GHG emissions.**

Accomplishments: The manual was distributed to **extension services** and **agricultural organizations** across the country.

Agribusiness Consultant

Lotus Consulting Ltd., Athens, GR

July 2006-September 2008

Main job tasks and projects:

- **Educational and training programs** to junior-mid management staff from agri-food sector
- Design and analysis of surveys
- **Operation Research**
- **Integrated crop management**/quality systems (orchards and vegetable crops)
- Legislation in Agricultural, Environmental and Energy Policy issues (i.e. Cross Compliance and Agri-Environmental Schemes e.g. Nitrate Directive, Water Quality, Landfill and Renewable Energy Directive)
- **Participation** (i.e., proposal preparation, implementation, execution and monitoring) in various projects e.g. Crops reform and rural development
- **Development of business plan** on behalf of agricultural cooperatives
- **Traceability** of olive oil and edible olives “From the field to the table” (preparation/execution)
- **Businesses transfer** funded by the national organization of **Small and Medium Enterprises and Handicraft** (preparation/execution/monitoring)
- Development portfolios for “**Protected Geographical Indication**” for **potato** and **raisin** (European Union regulations EC/506/2006 and EC/509/2006). These products have been classified by the European Union as protected products of geographical indication under vegetables and nuts-raisins categories respectively (preparation/execution/monitoring).
- **Modernization, expansion of agri-food and beverages industries** (preparation/execution/monitoring).

Accomplishments: Successful completion of projects worth of € **1.2 million**. In addition, several workshops and training programs for farmers and other agribusiness professionals were successfully delivered.

Authorship

Lavoisier SAS (FR) / Intercept Ltd., UK

October 2000-March 2005

***Author** of the book entitled “*Encyclopaedic Dictionary of Weed Science: Theory and Digest*”. This book provides information that was adopted, for the purposes of weed science, from twenty-three scientific fields (e.g. agronomy, agricultural machinery, application technology, plant physiology, environmental modelling, soil science, pesticide toxicology, crop nutrition, crop protection, statistics, seed science, population dynamics, genetics, cytology, plant morphology etc.) (<https://www.amazon.com/Encyclopaedic-Dictionary-Weed-Science-Digest/dp/1898298998>).

Project Manager

Markit Economics (Former NTC Research Ltd), UK

June 2000-August 2004

*Main job tasks and projects:

- Conducting and administrating two monthly surveys

- Writing and editing two monthly reports at restricted deadlines
- Working in a close liaison with representatives from **300 industries** from the **manufacturing sector**
- Distribution of the survey's press release to media (newspapers and newswires), European Central Bank, Reuters and various economic organisations
- **Planning and execution of strategic and goal-oriented decisions** (i.e. establishment of collaborations for sponsorship/partnership).

Accomplishments: The survey, under my management, became well-known **worldwide**. The launch of the project's **press conference**, organized exclusively under my direction, was extremely successful as a significant amount of press coverage in newswires and newspapers was achieved. Findings and subsequent reports from this survey are distributed in many organizations and institutes worldwide since then.

Teaching

Spring Semester (February 2022-June 2022)

GBA0201: Agronomy-General Principles. (2 hrs per week)

CLE0802: Precision Agriculture (theory and Lab-3 hrs per week)

PLP0808: Weed Science (2 hrs per week)

Supervision

Undergraduates' Final Dissertations (a prerequisite for graduation).

Four students. Surveys for the evaluation of Good Agricultural Practices in cotton, winter wheat, potato and vine orchards across Greece

PhDs

One PhD student on Integrated Systems for Food and Energy. Title of the project: Utilization of rice crop residuals for biogas production through anaerobic digestion and the use of digestate as fertilizer for added value crops.

Awards

- **Outstanding Reviewer.** Weed Science Society of America (**WSSA, 2018**). (<http://wssa.net/2018/02/weed-science-society-of-america-announces-2018-award-winners/>)
- Scholarship by NATO (**NATO, 2006**)
- Prize money for **organising a successful press conference (Markit Economics-NTC-Research, 2003)**. This resulted in significant monthly press coverage from national and international media
- **Scholarship** by the National Scholarships Foundation of Greece after participating in a three-day national competitive exam in Botany, Plant Breeding and Crop Physiology. Awarded for a period of three years and six months (**National Scholarship Foundation, 1994**).

Service

- **Elected Member of the Greek Weed Science Society (2022-2024)**
- **Member of the Organizing Committee for the 19th European Weed Research Society Symposium.** Athens, Greece, June 20-23 2022.
- **International Weed Science Society** Publicity and Promotion Committee (January 2019-January 2021). Promotion of the 8th International Weed Science Congress (IWSC 2020), Bangkok, Thailand to various scientific societies worldwide.
- **Co-chair in SWSS Meeting 2018**, Atlanta, Georgia for the following sessions:
 - a) Physiological and Biological Aspects of Weed Control
 - b) Vegetation Management in Utilities, Railroads, Highway Rights of Way, Industrial Sites and Forestry. (<https://www.swss.ws/wp-content/uploads/SWSS-2018-Program-Print-Final.pdf>)
- **Judge** for the session of graduate students' oral presentations in **SWSS Meeting 2018**, Atlanta, Georgia.

Grant Proposal Evaluator - Project Team Member

- Grant proposal evaluator for the Polish National Science Centre (Narodowe Centrum Nauki-NCN) <http://www.ncn.gov.pl>. Project No. 349751, Panel NZ8. Principal Investigator: Dr. L. M. Polechonska, University of Wroclaw, Poland.

- National Centre of Science and Technology Evaluation, Ministry of Education and Science, Republic of Kazakhstan, <https://www.ncste.kz/en/main>
- Peer reviewer for the Italian Scientific Evaluation fundamental research managed by Ministero dell' Istruzione dell' Universita e della Ricerca (MIUR).
- Agricultural University of Athens, Greece. External team member for the “**Integrated Pest Management Decisions**”, a multidisciplinary project with 10 participating European universities, funded by the European Union’s Horizon 2020 research and innovation program under grant agreement No 817617.

PhD Thesis Examiner

- On December 16, 2020 I was appointed as an examiner by the Graduate Research Examination Board of the thesis submitted to the University of New England by Graham Charles for the degree of Doctor of Philosophy. His thesis entitled “Developing a multi-species weed-control threshold model for high-yielding irrigated cotton” passed with minor corrections and Graham was granted with a PhD degree.

Collaborations

- European Food Safety Authority Member of the experts and Technical Advisors (2021-Present)
- ICF International (2016-2017)
Contact person: Dr Kirsten R. Jaglo (Expert Consultant)
- United States Dept. of Agriculture (2016-Present)
Contact person: Dr Steve O. Duke
Contact person: Dr Andrew J. Price
Contact person: Dr David Walker
Contact person. Adam Menhhan
- Rothamsted Research Institute, UK (2015-present)
Contact person: Dr Jonathan S. West (Senior Research Scientist)
- International Centre for Biosaline Agriculture-ICBA, United Arab Emirates (2016)
Contact person: Dr Dionyssia Lyra (Research Agronomist)
- Ministry of Science and Technology, India (2015-Present)
Contact person: Dr Anoop Singh (Senior Scientist)
- Queen’s University Belfast, Northern Ireland, UK (2016)
Contact person: Dr Beatrice Smyth (Lecturer)
- College of Engineering, Prince Mohammad Bin Fahd University (PMU), Saudi Arabia (2017-2019)
Contact person: Dr Nizami (Associate Professor)
- Environmental Systems Analysis, Energy and Environment, Sweden (2014-2015)
Contact person: Dr Sverker Molander (Professor).

Affiliations-Memberships

- Weed Science Society of America (2016-present)
- European Food Safety Authority (EFSA) (member of experts’ team) (2008-2015 and 2021-present)
- Gamma Sigma Delta, Arkansas Chapter (2014-2019)
- Southern Weed Science Society (2016-2020)
- European Plant Science Organisation (EPSO) (2007-2014)
- Food Climate Research Network (September 2009-2018)
- Association of Applied Biologists (2003-2014)
- System Dynamics Society (2004-2008)
- European Weed Research Society (2000-2014)
- Operational Research Society (2004-2007).

Editorial Board

- Agronomy for Sustainable Development (**Associate editor, March 2015-Present**).
(<http://www.springer.com/life+sciences/agriculture/journal/13593/PS2?detailsPage=editorialBoard>)

- Frontiers in Agronomy (**Associate Editor, April 2022-Present**)
<https://loop.frontiersin.org/people/1014892/network>
- Journal of Agricultural Science (**Associate editor-October 2008-March 2018**).
(<http://ccsenet.org/journal/index.php/jas/about/editorialTeam>)

Guest Editor

1) Special issue in Agronomy MDPI (IF 2.603)

Guest editors: Travlos I., Korres N.E., De Prado R.

Weed Management and New Approaches.

http://www.mdpi.com/journal/agronomy/special_issues/weed_manage

2) Special issue in Agronomy MDPI (IF 2.603)

Guest editors: Travlos I., Korres N.E., De Prado R.

Weed Management and Sustainable Agriculture.

https://www.mdpi.com/journal/agronomy/special_issues/weeds_sustainable_agriculture

3) Special Issue in Agronomy MDPI (IF 3.417)

Guest editors: N.E. Korres, M. Rehan, A. Singh, D. Rathore, J.L. Hao, X. Wang, A.S. Nizami.

Valorization of Agricultural Residues to Renewable Energy and Value-Added Products

https://www.mdpi.com/journal/agronomy/special_issues/Agricultural-Residues

4) Special issue in Plants MDPI (IF 3.935)

Guest Editors: Korres N.E. and Gitsopoulos T.K.

Super-weeds: Knowledge of their biology, physiology and ecology will alleviate their effects on crops and enhance management options for long-term control

(https://www.mdpi.com/journal/plants/special_issues/Super_Weeds).

Reviewer (representative journals)

- Nature
- Weed Science
- Weed Technology
- Weed Research
- Agriculture, Ecosystems and Environment
- Agronomy Journal
- Crop Protection
- PloS One
- Pest Management Science
- Bioresources
- Bioresource Technology
- Waste and Biomass Valorization
- Journal of Industrial Ecology
- Journal of Bioprocessing & Biotechniques
- Journal of Soil Science and Environmental Management
- Biological Agriculture & Horticulture
- Phytoparasitica
- International Journal of Plant Physiology and Biochemistry
- Journal of Cereals and Oilseeds
- Journal of Agricultural Extension and Rural Development

Invited Speaker

- 1) **Korres N.E.** (2019). Weed Science. Research, extension, and new trends in the USA. **Invited speaker** by the Weed Science Society of Greece. Greek Weed Science Society 20th Conference. Weed Science. Problems, trends and modern challenges. Agrinio, Greece, April 4-6, 2019.
- 2) **Korres N.E.** (2010). Integrated process for the production of grass biomethane. EPA funded Conference, 15 April 2010. Brookfield, University College Cork, Cork, Ireland.

Publications

Books

- 1) **Korres N.E.**, Travlos I. & Gitsopoulos T.K. [Eds.] (2022). Ecologically Based Weed Management. Concepts, Challenges and Limitations. Pub. Wiley Pub. Co., NJ, USA (in press).
- 2) **Korres N.E.**, Burgos N.R. & Duke S.O. (Eds.) (2019). Weed Control: Sustainability, Hazards and Risks in Cropping Systems Worldwide. Pub.: Science Publishers, an imprint of CRC Press/Taylor and Francis Pub. Co., 678 p. ISBN 978-1-498-78746-8.
- 3) **Korres N.E.**, O'Kiely P., Benzie J. & West J.S. (Eds.) (2013). Bioenergy Production by Anaerobic Digestion: Using Agricultural Biomass and Organic Waste. Publisher: Earthscan, an imprint of Routledge/Taylor & Francis Publishing Group. ISBN 978-0-415-69840-5 (**hardback**) and 978-1-138-36410-3 (**paperback**).
- 4) **Korres N.E.** (2005). Encyclopaedic Dictionary of Weed Science: Theory and Digest. Publishers: Lavoisier SAS (France), Intercept Ltd. (UK). ISBN 1-898298-99-8.

Peer-reviewed Journal Articles

- 1) **Korres N.E.**, Norsworthy J.K., FitzSimons T., Roberts T.L., Oosterhuis D.M., Govindjee (2022) Secondary sexual dimorphism traits under abiotic stress in dioecious species. The case of *Amaranthus palmeri*. *Scientific Reports-Nature* (in press).
- 2) **Korres N.E.**, Singh A., Prasad S. (2022). Management and use of agricultural residues for greenhouse gas emissions reduction with implications on life cycle assessment for agricultural production systems. A review. *Advances in Agronomy* (in press).
- 3) **Korres N.E.**, Loka D.A., Gitsopoulos T.K., Varanasi V.K., Chachalis D., Price A., Slaton N.A. (2022) Salinity effects on rice, rice weeds and strategies to secure crop productivity and effective weed control. A review. *Agronomy for Sustainable Development* (in press).
- 4) Schwartz-Lazaro L.M., **Korres N.E.***, Bararpour M.T., Bagavathiannan M.V., Green J., Norsworthy J.K. (2022) Population dynamics of naturally occurring weed flora in response to crop rotation and HPPD-based herbicide programs. *Weed Technology* (in press) *Corresponding author.
- 5) Maity A., Young B., Schwartz-Lazaro LM, **Korres N.E.**, Walsh M.J, Norsworthy J.K, Bagavathiannan M.V. (2022) Harvest-time and post-harvest weed seedbank management tactics for Italian ryegrass (*Lolium perenne* ssp. *multiflorum*) in wheat. *Weed Technology* (doi: [10.1017/wet.2022.16](https://doi.org/10.1017/wet.2022.16)).
- 6) Schwartz-Lazaro L.M., Shergill L.S., Evans J.A., Bagavathiannan M.V., Beam S.C., Bish M.D., Bond J.A., Bradley K.W., Curran W.S., Davis A.S., Everman W.J., Flessner M.L., Harring S.C., Jordan N.R., **Korres N.E.**, Lindquist J.L., Norsworthy J.K., Sanders T.L., Steckel L.E., VanGessel M.J., Young B., Mirsky S.B. (2022). Seed shattering phenology at soybean harvest of economically important weeds in multiple regions of the United States. Part 3: Drivers of seed shatter. *Weed Science* 70, 79-86.
- 7) Schwartz-Lazaro L.M., Shergill L.S., Evans J.A., Bagavathiannan M.V., Beam S.C., Bish M.D., Bond J.A., Bradley K.W., Curran W.S., Davis A.S., Everman W.J., Flessner M.L., Harring S.C., Jordan N.R., **Korres N.E.**, Lindquist J.L., Norsworthy J.K., Sanders T.L., Steckel L.E., VanGessel M.J., Young B., Mirsky S.B. (2021). Broadleaf weeds phenology across US agricultural systems. Wide Area Project. *Weed Science* 69, 95-103.
- 8) Schwartz-Lazaro L.M., Shergill L.S., Evans J.A., Bagavathiannan M.V., Beam S.C., Bish M.D., Bond J.A., Bradley K.W., Curran W.S., Davis A.S., Everman W.J., Flessner M.L., Harring S.C., Jordan N.R., **Korres N.E.**, Lindquist J.L., Norsworthy J.K., Sanders T.L., Steckel L.E., VanGessel M.J., Young B., Mirsky S.B. (2021). Grass weeds phenology across US agricultural systems. Wide Area Project. (2020) *Weed Science* 69, 104-110.
- 9) **Korres N.E.** & Dayan F.E. (2020). Climate change effects on crop and weeds. The need for climate-smart adaptation paradigm. *Outlooks on Pest Management* 31, 210-215.
- 10) **Korres N.E.**, Norsworthy J.K., Mauromoustakos A. & Williams M.M. (2020). Soybean density and Palmer amaranth (*Amaranthus palmeri*) establishment time. Effects on weed biology, crop yield and economic returns. *Weed Science* 68: 467-475.
- 11) **Korres N.E.**, Moody J., Hausman N., Kitis E.Y. & Williams M.M. (2020). Integrated weed management strategies with cereal rye (*Secale cereale* L.) mulch in processing vegetable legumes. *Agronomy Journal* 112, 4264-4275.

- 12) Prasad S., Singh A., **Korres N.E.**, Rathore D., Sevada S. & Pant D. (2020). Sustainable utilization of crop residue for energy production: A Life Cycle Assessment (LCA) perspective. *Bioresource Technology*. <https://doi.org/10.1016/j.biortech.2020.122964>
- 13) Leguizamón E.S., Ferrari G., Williams M.M., Burgos N.R., Travlos I. & **Korres N.E.*** (2019). Response of annual weeds to glyphosate: Evaluation and optimization of application rate based on fecundity-avoidance biomass threshold criterion. *Agronomy* 9, 851; doi:10.3390/agronomy9120851. *Corresponding author
- 14) Varanasi V.K., Brabham C., **Korres N.E.** & Norsworthy J.K. (2019). Non-target site resistance in Palmer amaranth (*Amaranthus palmeri*) confers cross-resistance to PPO inhibiting herbicides. *Weed Technology* 33(2), 349-354.
- 15) **Korres N.E.**, Burgos N.R., Vurro M., Travlos I., Gitsopoulos T.K., Varanasi V.K., Duke S.O., Kudsk P., Brabham C.D., Rouse C.E. & Salas-Perez R. (2019). New directions for integrated weed management: Modern technologies, tools and knowledge discovery. *Advances in Agronomy*, Vol. 155, 243-319.
- 16) **Korres N.E.**, Norsworthy J.K. & Mauromoustakos A. (2019). Effects of Palmer amaranth (*Amaranthus palmeri*) establishment time and distance from the crop row on biological and phenological characteristics of the weed: Implications on soybean yield. *Weed Science* 67(1), 126-135.
- 17) Price A.J., **Korres N.E.**, Norsworthy J.K. & Li S. (2018). Influence of a cereal rye cover crop and conservation tillage on the critical period for weed control in cotton. *Weed Technology* 32(6), 683-690.
- 18) Bararpour T., **Korres N.E.**, Burgos N.R., Hale R.R. & Tseng T.M.P. (2018) Performance of pinoxaden on the control of diclofop-resistant *Lolium perenne* L. ssp. *multiflorum*) in winter wheat. *Agriculture*, 8, 114. Doi: 10.3390/agriculture8070114.
- 19) **Korres N.E.**, Norsworthy J.K., Young B.G., Reynolds D.B., Johnson W.G., Conley S.P., Smeda R.J., Mueller T.C., Spaunhorst D.J., Gage K., Loux M., Kruger G.R., & Bagavathiannan M.V. (2018). Seedbank persistence of Palmer amaranth (*Amaranthus palmeri*) and waterhemp (*Amaranthus tuberculatus*) across diverse geographical regions in the United States. *Weed Science* 66(4), 446-456.
- 20) Norsworthy J.K., **Korres N.E.***, & Bagavathiannan M.V. (2018). Weed seedbank management: Revisiting how herbicides are evaluated. *Weed Science* 66(4), 415-417. *Corresponding author
- 21) Bararpour T., **Korres N.E.** (2018). Effects of simulated tillage and temperature on *Senna obtusifolia* and *Xanthium strumarium* seed survival, seedling emergence and seedbank dynamics. *Agriculture* 8, 61; Doi: 10.3390/agriculture8040061.
- 22) **Korres N.E.** & Norsworthy J.K. (2017) Palmer amaranth demographic and biological characteristics in wide-row soybean. *Weed Science* 65(4), 491-503.
- 23) **Korres N.E.**, Norsworthy J.K., Brye K.R., Vaughn S.J Jr. & Mauromoustakos A. (2017). Relationships between soil properties and the occurrence of the most agronomically important weed species in the field margins of eastern Arkansas - implications for weed management in field margins. *Weed Research* 57, 159-171.
- 24) **Korres N.E.**, Norsworthy J.K., FitzSimons T., Roberts T.L., & Oosterhuis D.M. (2017) Differential response of Palmer amaranth (*Amaranthus palmeri*) gender to abiotic stress. *Weed Science* 65(2), 213-227.
- 25) **Korres N.E.**, Norsworthy J.K., Burgos N.R. & Oosterhuis D.M. (2017). Temperature and drought impact on rice production: An agronomic perspective regarding short- and long-term adaptation measures. Special issue on Rice and Climate Change. *Water Resources and Rural Development* 9, 12-27 (**invited paper**).
- 26) Bararpour M.T., Norsworthy J.K., Burgos N.R., **Korres N.E.** & Gbur E.E. (2017). Identification and biological characteristics of ryegrass accessions in Arkansas. *Weed Science* 65(3), 350-360.
- 27) Bararpour M.T., **Korres N.E.**, Allen T.W. & Bond J.A. (2017). Infection of *Sorghum bicolor*, selected grass species and *Zea mays* by *Gloeocercospora sorghi*, causal pathogen of zonate leaf spot. *Phytoparasitica*. DOI: 10.1007/s12600-017-0583-0.
- 28) **Korres N.E.**, Norsworthy J.K., Tehranchian P., Gitsopoulos T.C., Loka D.A., Oosterhuis D.M., Moss S., Gealy D., Burgos N.R., Miller R. & Palhano M. (2016). Cultivars to face climate change effects on crops and weeds: a review. *Agronomy for Sustainable Development* 36(12). DOI: 10.1007/s13593-016-0350-5 (**invited paper**).
- 29) Norsworthy J.K., **Korres N.E.***, Walsh M.J. & Powles S.B. (2016). Integrating herbicide programs with harvest weed seed control and other fall management practices for the control of glyphosate-resistant Palmer amaranth. *Weed Science* 64, 540-550. *Corresponding author

- 30) Tehranchian P., Norsworthy J.K., **Korres N.E.**, McElroy S., Chen S. & Scott R.C. (2016). Evolution of aryloxyphenopropionate herbicide resistance (acetyl-CoA carboxylase inhibitors) in Amazon sprangletop: Confirmation, control and molecular basis of resistance. *Pesticide, Biochemistry and Physiology* 133, 79-84.
- 31) Tehranchian P., Norsworthy J.K., Palhano M., **Korres N.E.**, McElroy S., Zhang H., Bagavathiannan M.V. & Scott R.C. (2016). Evidence for reduced glyphosate efficacy on ALS-inhibiting herbicide-resistant yellow nutsedge. *Weed Science* 64, 389-398.
- 32) Ouda O.K. M., Raza S.A., Nizami A.S., Rehan M., Al-Waked R. & **Korres N.E.** (2016). Global status of waste to energy: A case study of Saudi Arabia. *Renewable & Sustainable Energy Reviews* 61, 328-340.
- 33) **Korres N.E.**, Norsworthy J.K., Bagavathiannan M.V. & Mauromoustakos A. (2015). Distribution of arable weed populations along eastern Arkansas Mississippi Delta roadsides: Occurrence, distribution, and favored growth habitats. *Weed Technology* 29, 587-595.
- 34) **Korres N.E.**, Norsworthy J.K., Bagavathiannan M.V. & Mauromoustakos A. (2015). Distribution of arable weed populations along eastern Arkansas Mississippi Delta roadsides: Factors affecting weed occurrence. *Weed Technology* 29, 596-604.
- 35) **Korres N.E.** & Norsworthy J.K. (2015) Influence of a rye cover crop on the critical period for weed control in cotton. *Weed Science* 631, 346-352.
- 36) Zamanidis P., **Korres N.E.*** & Argyropoulos D. (2011). Qualitative studies of "Bacouri": A Greek high-quality vine variety. *Journal of Agricultural Science* 3:2, 56-63. *Corresponding author.
- 37) Nizami A.S., Molander S., Asam Z.Z., Rafique R., **Korres N.E.**, Kiely G. & Murphy J.D. (2011). Comparative analysis of the EIA system of developed and developing countries: Cases of hydroelectric power plants in Pakistan, Norway and Sweden. *International Journal of Sustainable Development & World Ecology* 18(2), 134-142.
- 38) Singh A., Nizami A.S., **Korres N.E.** & Murphy J.D. (2011). The effect of reactor design on the sustainability of grass biomethane. *Renewable & Sustainable Energy Reviews* 15, 1567-1574.
- 39) **Korres N.E.**, Singh A., Nizami A.S. & Murphy J.D. (2010). Is grass biomethane a sustainable transport biofuel? *Biofuels, Bioproducts and Biorefining* 4(3), 310-325.
- 40) Ahmed A., **Korres N.E.**, Ploennigs J., Elhadi H. & Menzel K. (2010). Mining building performance data for energy-efficient operation. *Advanced Engineering Informatics* 25:2, 341-354.
- 41) Ahmed A., Otreba M., **Korres N.E.**, Elhadi H. & Menzel K. (2010). Assessing building performance of naturally day-lit buildings using data mining. *Advanced Engineering Informatics* 25(2), 364-379.
- 42) Smyth B.M., O'Gallachoir B.P., **Korres N.E.** & Murphy J.D. (2010). Can we meet targets for biofuels and renewable energy in transport given the constraints imposed by policy in agriculture and energy? *Journal of Cleaner Production* 18, 1671-1685.
- 43) Singh A., Pant D., **Korres N.E.**, Nizami A.S., Prasad S., Murphy J.D. (2010). Key issues in life cycle assessment of ethanol production from lignocellulosic biomass: A review. *Bioresource Technology* 101, 5003-5012.
- 44) Nizami A.S., **Korres N.E.**, Murphy J.D. (2009). Review of the integrated process for the production of grass biomethane. *Environmental Science and Technology* 43(22), 8496-8508.
- 45) Chachalis D., **Korres N.E.** & Khah E.M. (2008). Factors affecting seed germination and emergence of Venice mallow (*Hibiscus trionum*). *Weed Science* 56(4), 509-515.
- 46) **Korres N.E.** & Froud-Williams R.J. (2004). The interrelationships of winter wheat cultivars, crop density and competition of naturally occurring weed flora. *Biological Agriculture and Horticulture* 22(1), 1-20.
- 47) **Korres N.E.**, Froud-Williams R. J. & Moss S. (2003). Chlorophyll fluorescence technique as a rapid diagnostic test on the effects of photosynthetic inhibitor chlorotoluron on two winter wheat cultivars. *Annals of Applied Biology* 143, 53-56.
- 48) **Korres N.E.** & Froud-Williams R.J. (2002). Effects of winter wheat cultivars and seed rate on the biological characteristics of naturally occurring weed flora. *Weed Research* 42(6), 417-428.
- 49) **Korres N.E.** & Froud-Williams R.J. (2001). The effects of varietal selection, seed rate and weed competition on quantitative and qualitative traits of grain yield in winter wheat. *Aspects of Applied Biology* 64, 147-156.

Book Chapters

- 1) **Korres N.E.** (2022). Ecologically-based weed management: Implications and agroecosystem services. In Korres N.E., Travlos I. & Gitsopoulos T.K. [Eds.] (2020). *Ecologically Based Weed Management. Concepts, Challenges and Limitations*. Wiley Pub. Co., NJ, USA (in press).

- 2) Rao A.N., **Korres N.E.** (2022). Climate change and ecologically-based weed management. In Korres N.E., Travlos I. & Gitsopoulos T.K. [Eds.] (2020). *Ecologically Based Weed Management. Concepts, Challenges and Limitations*. Wiley Pub. Co., NJ, USA (in press).
- 3) **Korres N.E.** (2020). Utilization and management of agricultural wastes for bioenergy production, weed control and soil improvements through microbial and technical processes. In Singh A., Srivastava S., Rathore D., Pant D. [Eds]. *Environmental microbiology and biotechnology – Vol. 1: Biovalorization of solid waste and wastewaters*. Springer Nature Singapore Pte Ltd., pp. 143-172.
- 4) Waqas M., **Korres N.E.**, Daud-Khan M., Nizami A.S., Deeba F., Ali I., Hussain H. (2019). Advances in the concept and methods of seed priming. In Hasanuzzaman M., Fotopoulos V. (Eds.). *Priming and pretreatment of seeds and seedlings: Implication in plant stress tolerance enhancing productivity in crop plants*. Springer Nature Singapore, Pte Ltd., pp. 11-25
- 5) Varanasi A., **Korres N.E.**, Varanasi V.K. (2019). Plant responses and mechanisms to cold stress. In Hasanuzzaman M., Nahar K., Fujita M., Oku H., Islam M.T. (Eds.) *Approaches for enhancing abiotic stress tolerance in plants*. Taylor & Francis/CRC Press., pp.129-148. ISBN: 978-1-351-10471-5.
- 6) **Korres N.E.** (2019). Herbicide effects on humans: Exposure, short and long-term effects and occupational hygiene. In Korres N.E., Burgos N.R., Duke S.O. (Eds.). *Weed Control: Sustainability, Hazards, and Risks in Cropping Systems Worldwide*. Pub.: Science Publishers, an imprint of CRC Press/Taylor and Francis Pub. Co., pp.14-32. ISBN 978-1-498-78746-8.
- 7) **Korres N.E.**, Reddy K.N., Rouse C., & King C.A. (2019). Sustainable weed control in soybean. In Korres N.E., Burgos N.R., Duke S.O. (Eds.). *Weed Control: Sustainability, Hazards, and Risks in Cropping Systems Worldwide*. Pub.: Science Publishers, an imprint of CRC Press/Taylor and Francis Pub. Co., pp. 288-306. ISBN 978-1-498-78746-8.
- 8) Monks D.W., Jennings K.M., Meyers S.L., Smith T.P., & **Korres N.E.** (2019). Sweet potato: Important weeds and sustainable weed management In Korres N.E., Burgos N.R., Duke S.O. (Eds.). *Weed Control: Sustainability, Hazards, and Risks in Cropping Systems Worldwide*. Pub.: Science Publishers, an imprint of CRC Press/Taylor and Francis Pub. Co., pp. 554-580. ISBN 978-1-498-78746-8.
- 9) **Korres N.E.**, Varanasi V.K., Slaton N.A, Price A.J., Bararpour T. (2018). Effects of salinity on rice and weeds. Short- and long-term adaptation strategies and weed control. In Hasanuzzaman M., Fujita M., Nahar K., Biswas J.K. (Eds.). *Advances in rice research for abiotic stress tolerance*. Pub., Woodhead Publishing, Elsevier, pp. 159-176. ISBN: 978-0-128-14332-2.
- 10) **Korres N.E.** (2018) Agronomic weed control: A trustworthy approach for sustainable weed management. In Jabran K. & Chauhan B.S. (Eds.) *Non-chemical weed control*. Pub., Academic Press, Elsevier, pp. 97-114. ISBN: 978-012-809-881-3.
- 11) **Korres N.E.**, Varanasi V., Gitsopoulos T. K., Bararpour T. M. (2017). Climate change effects on rice, weeds and weed control in rice of Asian-Pacific Region. In: Rao, A.N. and Matsumoto, H. (Eds.). 2017. *Weed management in rice in the Asian-Pacific region*. Asian-Pacific Weed Science Society (APWSS); The Weed Science Society of Japan, Japan and Indian Society of Weed Science, India, pp. 42-72. ISBN: 978-931-978-4-4.
- 12) **Korres N.E.** & Norsworthy J.K. (2016). Biohydrogen production from agricultural biomass and organic wastes. In Singh A. and Rathore D. (Eds.) *Biohydrogen production: Sustainability of current technology and future perspective*, Springer Science & Business Med., pp. 49-67. ISBN: 978-81-322-3577-4.
- 13) **Korres N.E.** (2013). Life cycle assessment of agricultural production systems with main emphasis in biogas and bioethanol production. In Singh A., Olsen S. I. & Pant D. (Eds.) *Life Cycle Assessment of Renewable Energy Sources.*, Springer, pp. 37-78. ISBN: 978-1-4471-5364-1.
- 14) **Korres N.E.** (2013). Life cycle assessment as a tool for assessing biomethane production sustainability. In Korres N.E., O’Kiely P., Benzie J. & West J. (Eds.) (2013) *Bioenergy Production by Anaerobic Digestion: Using Agricultural Biomass and Organic Waste*. Earthscan from Routledge/Taylor & Francis, pp. 317-359. ISBN 978-0-415-69840-5.
- 15) McEniry J., **Korres N.E.** & O’Kiely P. (2013). Grass and grass silage. Agronomical characteristics for biomethane production. In Korres N. E., O’Kiely P., Benzie J. & West J. (Eds.) (2013) *Bioenergy Production by Anaerobic Digestion: Using Agricultural Biomass and Organic Waste*, Earthscan from Routledge/Taylor & Francis, pp. 49-66. ISBN 978-0-415-69840-5.
- 16) **Korres N.E.** (2013). Storage and distribution of biomethane. In Korres N.E., O’Kiely P., Benzie J. & West J. (Eds.) (2013) *Bioenergy Production by Anaerobic Digestion: Using Agricultural Biomass and Organic Waste*. Earthscan from Routledge/Taylor & Francis, pp. 183-194. ISBN 978-0-415-69840-5.

- 17) **Korres N.E.**, Nizami A.S. (2013). Variation in anaerobic digestion. Need for process monitoring. In Korres N.E., O'Kiely P., Benzie J. & West J. (Eds.) (2013) *Bioenergy Production by Anaerobic Digestion: Using Agricultural Biomass and Organic Waste*. Earthscan from Routledge/Taylor & Francis, pp. 194-231. ISBN 978-0-415-69840-5.
- 18) **Korres N.E.**, Dekazos A., Argyropoulos D.N., Ahmed A. & Stack P. (2013). General principles of data warehouse and data mining in anaerobic digestion. In Korres N. E., O'Kiely P., Benzie J. & West J. (Eds.) (2013) *Bioenergy Production by Anaerobic Digestion: Using Agricultural Biomass and Organic Waste*. Earthscan from Routledge/Taylor & Francis, pp. 231-259. ISBN 978-0-415-69840-5.
- 19) **Korres N.E.**, Thamsirirot T., Smyth B., Nizami A.S., Singh A., & Murphy J.D. (2011). Grass biomethane for agriculture and energy. In Lichtfouse E. (Ed.) (2011) *Sustainable Agriculture Reviews*, Vol. 7, Genetics, Biofuels and Local Farming Systems. Springer Science & Business Media, pp. 5-49.

International Conferences

- 1) **Korres N.E.**, Norsworthy J.K., FitzSimons T., Roberts T.L., Oosterhuis D.M., Govindjee G. (2022) Exploring the dioecy nature of weeds: The case of *Amaranthus palmeri*. 19th European Weed Research Society Symposium. June 20-23, 2022. Athens, Greece. Keynote Presentation.
- 2) Kumari A., Price A., **Korres NE.** (2022). Influence of cover crop on the critical period for weed control in soybean. Weed Science Society of America and Canadian Weed Science Society. Joint Annual Meeting, Vancouver, CA. February 22 - 24, 2022 (virtual meeting).
- 3) Maity A., Young B.L., Lazaro L.M., **Korres N.E.**, Norsworthy J.K., Bagavathiannan M.V. (2020). Impact of harvest-time and post-harvest seedbank management tactics for Italian ryegrass (*Lolium multiflorum*) in South-Central US wheat production. Weed Science Society of America, Annual Meeting, Maui, HI, March 2 - 5, 2020
- 4) Young B.L., **Korres N.E.**, Lazaro L.M., Walsh M.J., Norsworthy J.K., Bagavathiannan M.V. (2019). The effectiveness of integrated tactics for managing johnsongrass in Inzen sorghum. Weed Science Society of America, Annual Meeting, VA. February 11 - 14, 2019.
- 5) Lazaro L.M., Evans J., Norsworthy J.K., Mirsky S.B., Davis A.S., Bradley K., Steckel L.E., Bagavathiannan M.V., Bond J.A., Lindquist J., Jordan N.R., Flessner M.L., VanGessel M.J., Everman W., Curran W.S., **Korres N.E.** (2019). Weed seed rain phenology: An area-wide approach. Weed Science Society of America, Annual Meeting, VA. February 11 - 14, 2019.
- 6) Young B.L., Sarangi D., **Korres N.E.**, Lazaro L.M., Walsh M.J., Norsworthy J. K., Bagavathiannan M.V. (2019). Harvest Weed Seed Control for Johnsongrass in Grain Sorghum: A Feasibility Analysis. Weed Science Society of America, Annual Meeting, VA. February 11 - 14, 2019.
- 7) **Korres N.E.** & Norsworthy J.K. (2018). Collection of quantitative herbicide performance data: Why should we not rely solely on visible assessments? Weed Science Society of America, Annual Meeting, VA. January 29 - February 1, 2018. (**oral presentation**).
- 8) **Korres N.E.** & Norsworthy J.K. (2018). Exploring the dioecious nature of Palmer amaranth. Weed Science Society of America, Annual Meeting, Tucson, Arizona, VA. January 29 - February 1, 2018.
- 9) **Korres N.E.**, Norsworthy J.K., Young B.G., Reynolds D.B., Johnson W.G., Conley S.P., Smeda R.J., Mueller T.C., Bagavathiannan M.V. (2018). Seedbank persistence of Palmer amaranth and waterhemp in the mid-south United States. Weed Science Society of America, Annual Meeting, VA. January 29 - February 1, 2018.
- 10) **Korres N.E.** & Norsworthy J.K. (2017). Knowledge of Palmer amaranth biology, phenology, and photochemistry aids development of sound management strategies. Weed Science Society of America, Annual Meeting, Tucson, Arizona, February 6-9, 2017 (**oral presentation**).
- 11) **Korres N.E.** & Norsworthy J. K. (2017). Palmer amaranth gender differentiation under abiotic stress and implications for integrated control. Weed Science Society of America, Annual Meeting, Tucson, Arizona, February 6-9, 2017.
- 12) **Korres N.E.**, Norsworthy J.K., Brye K., Skinner V. Jr, Mauromoustakos A. & Bagavathiannan M.V. (2016). Relationships between spatial weed distribution and soil properties. Weed Science Society of America, Annual Meeting, San Juan, Puerto Rico, February 8-11, 2016 (**oral presentation**).
- 13) **Korres N.E.**, Norsworthy J.K., Green J.K., Godwin J.A., Martin S.M. & Lancaster Z.D. (2016) Palmer amaranth demographics in wide row soybean. Weed Science Society of America, Annual Meeting, San Juan, Puerto Rico, February 8-11, 2016.

- 14) Tehranchian P., Norsworthy J.K. & **Korres N.E.** (2016). ACCase resistance on sprangletop. Weed Science Society of America, Annual Meeting, San Juan, Puerto Rico, February 8-11, 2016.
- 15) **Korres N.E.**, Norsworthy J.K. & Bagavathiannan M.V. (2015). Occurrence of arable weeds along roadsides in eastern Arkansas. Weed Science Society of America, Annual Meeting, Lexington, Kentucky, USA, February 9-12, 2015 (**oral presentation**).
- 16) **Korres N.E.** & Norsworthy J.K. (2015). Influence of Palmer amaranth interrow distance and emergence date on seed production in wide-row and drill-seeded soybean. Weed Science Society of America, Annual Meeting, Lexington, Kentucky, USA, February 9-12, 2015.
- 17) Singh A., **Korres N.E.** & Murphy J.D. (2011). Biomethane from agricultural waste: A clean vehicular biofuel. International Conference on Environment Energy and Development from Johensberg to Copenhagen ICEED-2010, Sambalpur University, Orissa, India, December 10-12, 2010.
- 18) Murphy J.D., **Korres N.E.** & Singh A. (2010). Grass Biomethane: A sustainable alternative industry for grassland. In Grassland in a changing world. European Grassland Federation 2010, Kiel Germany, Grassland Science in Europe, Vol. 15, 139-148.
- 19) **Korres N.E.**, O'Brien C., Smyth B., Nizami A.S., Thamisirioj T., Schulte R. & Murphy J.D. (2009). A preliminary analysis of energy balance and greenhouse gas (GHG) emissions of biomethane production as a transport fuel from grass/silage. A case study for Ireland. SETAC Europe: 19th Annual Meeting 31 May-4 June 2009, Goteborg, Sweden, 352 (**oral presentation**).
- 20) Murphy J.D., Smyth B., Nizami A. S., Thamsirioj T., Singh A. & **Korres N.E.** (2009). The potential for biomethane as a transport fuel in Ireland. In: Biofuels Directive to bio-based Transport Systems in 2020, IEA Bioenergy Task 39, Subtask Policy and Implementation Workshop, Dresden, Germany, June 2-5, 2009.
- 21) **Korres N.E.**, Froud-Williams R.J., Chachalis D., Pavli O. & Skaracis G.N. (2008). Yielding ability and competitiveness of wheat cultivars against weeds, 4th EPSO Conference "Plants for Life", Toulon (Cote d'Azur), France, 22-26 June 2008, 52.
- 22) **Korres N.E.** & Skaracis G. N. (2008). System-thinking essence in decision-making procedures. A conceptual approach integrating weed population dynamics and possible economical outputs, 4th EPSO Conference "Plants for Life", Toulon (Cote d'Azur), France, 22-26 June 2008, 100.
- 23) **Korres N.E.** & Froud-Williams R.J. (2002). Effects of winter wheat cvs, crop density and weed competition on nitrogen uptake by weeds and crop. Proceedings of 12th European Weed Research Society Symposium, Wangeningen, The Netherlands, 35-36.
- 24) **Korres N.E.** & Froud-Williams R.J. (1999). Effects of cultivar and crop density on herbicide sensitivity of winter wheat. Proceedings of Brighton Crop Protection Conference-Weeds. Brighton, UK, **Vol. 2**, 583-584.
- 25) **Korres N.E.** & Froud-Williams R.J. (1999). Varietal selection and seed rates for improved weed management in winter wheat. Proceedings of 11th European Weed Research Society Symposium, Basel, Switzerland, 115.
- 26) **Korres N.E.** & Froud-Williams R.J. (1997). The use of varietal selection and seed rates for enhanced weed suppression in winter wheat (*Triticum aestivum* L.). Proceedings of Brighton Crop Protection Conference-Weeds. Brighton, UK, **Vol.2**, 667-668.

National/Regional Conferences

- 1) Kaskani S., Koronis E., Lazaridou P., **Korres N.E.**, Lekka M.E. & Yfanti P. (2022). Morphological differentiation of an endemic population of sage and evaluation of essential traits qualitative traits. Proceedings of the 30th Conference of the Greek Society of Fruits and Vegetables. Climate Change Challenges for Fruit and Vegetables. Athens May 9-13 2022, Agricultural University of Athens, 271 p. (in Greek).
- 2) Lowry C.J., **Korres N.E.**, Colquhoun J., Peachey E., Williams M. (2020). Weed Communities in U.S. processing snap bean. The Northeastern Plant, Pest, and Soils Conference. Philadelphia, PA; January 6-9, 2020.
- 3) Shergill L.S., Lazaro L., Evans J., VanGessel M.J., Norsworthy J., Davis A., Bradley K., Steckel L.E., Bagavathiannan M., Bond J., Lindquist J.L., Jordan N., Flessner M.L., Everman W.J., **Korres N.E.**, Mirsky S. (2020). Weed seed rain phenology of economically important weeds in the Mid-Atlantic, North- and Southcentral Regions of the U.S. The Northeastern Plant, Pest, and Soils Conference. Philadelphia, PA; January 6-9, 2020.

- 4) Young B.L., **Korres N.E.**, Lazaro L.M., Walsh M.J., Norsworthy J.K., Bagavathiannan M. (2019). Integrated management of johnsongrass in Inzen sorghum. Southern Weed Science Society Meeting, Oklahoma City, February 3-6, 2019.
- 5) Young B.L., Sarangi D., **Korres N.E.**, Lazaro L.M., Walsh M.J., Norsworthy J.K., Bagavathiannan M. (2019) Feasibility of harvest weed seed control for johnsongrass in grain sorghum. Southern Weed Science Society Meeting, Oklahoma City, February 3-6, 2019.
- 6) **Korres N.E.**, Norsworthy J.K., Lazaro M.L. (2018). Effects of simulated dicamba and 2,4-D tank contamination on Roundup Ready 2 and Xtend soybean injury and yield. Southern Weed Science Society Meeting, Atlanta, GA. January 21 - 24, 2018 (**oral presentation**)
- 7) **Korres N.E.**, Norsworthy J.K., Lazaro L.M., Zaccaro M., Wright H., Brabham C.D., Varanasi V., Fogleman M., Moore M., Lancaster Z. (2018). Weed seed retention in Arkansas soybean. Southern Weed Science Society Meeting, Atlanta, GA. January 21 - 24, 2018.
- 8) Price A., **Korres N.E.**, Norsworthy J.K. (2018). Influence of a cereal rye cover crop and conservation tillage on the critical weed free period in cotton. Southern Weed Science Society Meeting, Atlanta, GA. January 21 - 24, 2018.
- 9) Lazaro L.M., Norsworthy J.K., **Korres N.E.** (2018). How does narrow windrow burning effect Palmer amaranth and waterhemp across the midsouthern US? Southern Weed Science Society Meeting, Atlanta, GA. January 21 - 24, 2018.
- 10) Lazaro L.M., **Korres N.E.**, Norsworthy J.K., Meyer C., Richburg J. (2018). The effects of HPPD-based herbicide programs on Palmer amaranth and barnyardgrass. Southern Weed Science Society Meeting, Atlanta, GA. January 21 - 24, 2018.
- 11) **Korres N.E.**, Norsworthy J.K. (2017). Roundup Ready 2 and Xtend soybean performance as affected by simulated dicamba and 2,4-D drift studies. Arkansas Crop Protection Association Meeting, Fayetteville, Arkansas, November 28-29, 2017 (**oral presentation**).
- 12) **Korres N.E.** & Norsworthy J.K. (2017). Palmer amaranth demographics in wide-row soybean. Southern Weed Science Society, Annual Meeting, Birmingham, Alabama, January 23-25, 2017 (**oral presentation**).
- 13) **Korres N.E.** & Norsworthy J.K. (2017). Effects of emergence date and inter-row Palmer amaranth distance on its biological and phenological characteristics. Southern Weed Science Society, Annual Meeting, Birmingham, Alabama, January 23-25, 2017.
- 14) **Korres N. E.** & Norsworthy J.K., Green J.K & Godwin J. A. (2016). Palmer amaranth biology and population dynamics in wide-row soybean. Arkansas Crop Protection Association, Fayetteville, Arkansas, November 26-28, 2016 (**oral presentation**).
- 15) **Korres N.E.**, Norsworthy J. K., Green J. K., Godwin J. A., Martin S. M. & Lancaster Z. D. (2015). Effects of soybean on population and sex expression of Palmer amaranth. Arkansas Crop Protection Association, Fayetteville, Arkansas, USA, December 1-2, 2015 (**oral presentation**).
- 16) Tehranchian P., Norsworthy J. K. Palhano M. & **Korres N.E.** (2015). Glyphosate efficacy of ALS resistant yellow nutsedge. Arkansas Crop Protection Association, Fayetteville, Arkansas, December 1-2, 2015.
- 17) **Korres N.E.** & Norsworthy J. K. (2014). Fall management practices and herbicide programs for controlling Palmer amaranth population and seed production in soybean. Arkansas Crop Protection Association, Fayetteville, Arkansas, December 1-2, 2014 (**oral presentation**).
- 18) Vlachos C., Margiolis N., **Korres N.E.** & Skaracis G. N. (2010). Life Cycle Analysis for the evaluation of sustainability in sweet sorghum for bioethanol production. Proceedings of the 13 Hellenic Conference in Plant Breeding, National Association of Agricultural Plant Breeding, Kalamata, Greece, 13-15 October 2010.
- 19) **Korres N.E.** & Chachalis D. (2006). System Dynamics and Weed Biological Control. Proceedings of the 14th Weed Science Conference organised by Greek Weed Science Society, Volos, Greece, 7-8 December 2006, 49 (**oral Presentation**).
- 20) **Korres N.E.** (2004). Chlorophyll fluorescence and herbicide phytotoxicity in winter wheat (*Triticum aestivum* L). Proceedings of the 13th Weed Science Conference organised by Greek Weed Science Society, Orestiada, Greece, 10-12 November 2004, 64 (**oral presentation**).

Miscellaneous

Technical Reports

- 1) **Korres N.E.**, Norsworthy J.K. & Scott R.C. (2015). Fall management practices and herbicide programs for controlling Palmer amaranth population and seed production in soybean. In Ross JE (Ed.). Arkansas Soybean Research Studies 2014. Research Series 631, 122-125, <http://arkansasagnews.uark.edu/1356.htm>.
- 2) Murphy J.D., **Korres N.E.**, Singh A., Nizami A.S., Smyth B. & Thamsiroj T. (2010). The potential of grass biomethane as a biofuel. Compressed biomethane generated from grass, utilised as a transport biofuel. CCRP Report. EPA Climate Change Research Programme 2007-2013. Under Science, Technology, Research and Innovation for the Environment (STRIVE) Program 2007-2013, available for download at <http://erc.epa.ie/safer/reports>.

Extension-Manuals

- 1) Skaracis G.N., **Korres N.E.** & Pavli O.N. (2008). Evaluation of potential energy crops in Greece. Greek Ministry of Rural Development and Food. Secretariat of the Research Committee Joint Ministerial, Third Community Support Framework.

Dissertations-Theses

- 1) **Korres N.E.** (2000). The effects of seed rate and varietal selection on weed suppression and herbicide sensitivity in winter wheat, PhD Thesis, Reading University, Reading, UK.
- 2) **Korres N.E.** (1995). The effects of growth retarding chemicals on growth of *Zea mays*, MSc Dissertation, Reading University, UK.
- 3) **Korres N.E.** (1994). The growth and chemical control of *Armillaria* spp., Erasmus Report, Technological Education Institute, Larisa, Greece and Reading University, reading, UK.

Professional Presentations without Published Abstracts or Papers

- 1) **Korres N.E.** (2006). Modelling complexity for decision making procedures. A conceptual approach on weed biological control. NATO Advance Study Institute Training School, 9/8-19/2006, Perugia, Italy (**oral presentation**).
- 2) **Korres N.E.** (2009). Grass biomethane. Anaerobic Digestion, Cre-composting Association of Ireland, Dublin, 6/24/2009 (**oral presentation**).

Book Reviews

- 1) **Korres N.E.** (2015) Agricultural Systems in the 21st Century, Global Agriculture Developments by Raza A. (ed.) (2013). Nova Science Publishers, Inc. Journal of Agricultural Science 7:6, Online Published: May 15, 2015 doi:10.5539/jas.v7n6pxx URL: <http://dx.doi.org/10.5539/jas.v7n6pxx>.

Public Media (Radio, Newswires, Newspapers, Magazines)

- 1) ERT radio-Ioannina. On air radio interview on the potential benefits of soybean in Greece (April 7, 2022)
- 2) Soybean: Seed production project and performance evaluation of soybean cultivars under Greek climate conditions. Ypaithros and Chora, Article April 1, 2022 (in Greek). <https://www.ypaithros.gr/dynatotites-kalliergeias-sogias-stin-ellada-ereynoun-panepistimio-ioanninon-usda>
- 3) Fertilization and irrigation need in maize. Ypaithros and Chora, Article, March 18, 2022 (in Greek)
- 4) Maize establishment and husbandry. Ypaithros and Chora. Article, March 4, 2022 (in Greek)
- 5) Chemical weed control in winter wheat. Ypaithros and Chora. February 11, 2022 (in Greek)
- 6) Rice production and drought. A radio interview hosted by NPS's "Here & Now", March 2018
- 7) Study Shows Fall Weed Controls Can Make a Significant Impact on Glyphosate-Resistant Palmer Amaranth. WSSA, July 28, 2016. <http://wssa.net/2016/07/study-shows-fall-weed-controls-can-make-a-significant-impact-on-glyphosate-resistant-palmer-amaranth>.
- 8) Diversify weed control strategy to control Palmer amaranth. Farm Futures, July 29, 2016. <http://farmfutures.com/story-diversify-weed-control-strategy-control-palmer-amaranth>.
- 9) Lining up the flags. Northwest Arkansas (newspaper), 6/5/2014.
- 10) Factors enhancing uncertainty of biofuels Life Cycle Assessment. Agriculture and Animal Production 10/2010, 84-88 (in Greek).
- 11) Food Climate Research Network (FCRN). Interview Series 2010 Cycle, November 2010 (<http://fcrn.org.uk/interviewSeries/interviews/index.htm>).

- 12) Biogas: A Sustainable Green-Energy Example. Agreco (agricultural newspaper). March 2010, issue 14 (in Greek) (www.agreco.net).
- 13) Employment and Greek Economy. Profit (financial newspaper), May 2002, pp. 26-27 (in Greek).

Training & Skills

Training

- **Bayesian Statistical Modeling**. The Center for Integrated Latent Variable Research (CILVR) at The University of Maryland. July 8-10, 2020
- Feeding a Hungry Planet: Agriculture, Nutrition and Sustainability. Online course provided by SDG Academy. April 18, 2018-June 30, 2018.
- **Responsible Conduct of Research** by Collaborative Institutional Training Initiative (CITI Program) (score 93 out of 100) (March 08, 2016).
- **e-learning** training, National and Kapodistrian University of Athens, Centre for Continuing Education, Greece “**Classroom Environment: Assessment & Improvement**” (10/2013-02/2014) (score 96 out of 100).
- **e-learning** training, National and Kapodistrian University of Athens, Centre for Continuing Education, Greece “**Assessment Assurance and Improvement of Quality in Education**” (10/2013-03/2014) (score 94 out of 100).
- Trained in **website development** (content management system Joomla) by Alpha Computer Training, Athens, Greece (17/03/2012-07/04/2012).
- Attendance in Workshop on “**Bayesian modelling using WinBugs**” organized by the Dept. of Mathematics, National Technical University of Athens, the Dept. of Statistics, Athens University of Economics and Business and Dept. of Applied Mathematics and Statistics, University of California, Santa Cruz. Athens 08/24-25/2010.
- Trained in **Teaching & Learning** organised by the Teaching & Learning Centre, UCC (03-04/2010).
- Attendee in “**Media Training Program**” organized by the Office of Media & Communications of University College Cork, Ireland (02/16/2010).
- Trained in **dynamic model building** “An introduction to dynamic model building in food science, microbiology and biochemistry” organised by Department of Food and Nutritional Sciences, UCC (05/11-12/2009).
- Trained in “**Anaerobic Digestion**” organised by Cre-Composting Association of Ireland (Dublin 06/24/2009).
- Trained in **geographical information systems** (University College Cork, Ireland, 2008).
- Trained in **integrated crop management-quality systems** (Lotus Consulting, Greece, 2007).
- Attendance in NATO’s, in co-operation with **Weizmann Institute of Sciences** and **Istituto di Scienze delle Produzioni**, Advance Study Institute Training School (09/8-19/2006) in Italy on “Novel biotechnologies for biocontrol agent enhancement and management”.
- Trained in writing successful business proposals by the Business Writing Centre (USA) (NTC-Research, UK, 2002).
- Trained in writing successful direct mail letters by The Chartered Institute of Marketing (UK) (NTC-Research, UK, 2002).
- **Erasmus student** at Reading University (UK) (02/1993-06/1993). **Chemical control** of three *Armillaria*’s spp. biotypes in seven potential tree hosts under controlled environmental conditions.

Skills

Lab techniques

- Boom equipped automated research track sprayer
- Chlorophyll content
- Chlorophyll fluorescence
- Dose response curves
- SigmaScan (automated image analysis)
- Geographical Information Systems (working knowledge)
- Soil particle analysis and soil texture determination
- Herbicide application-backpack pressurized sprayer

- Herbicide phytotoxicity assays
- Hobo data loggers (monitoring soil temperature and soil moisture)
- Grain specific weight and moisture content
- Molecular techniques (working experience)
- Nitrogen content in plant tissue determination
- Photosynthetic Active Radiation/Fractional Light Interception
- Seed viability (tetrazolium) and germination tests
- Dry and wet batch single and two-stage digesters.
- Hagberg Falling Number and determination of α -amylase activity
- Soil surveys and weed surveys
- Spectrometry and grain crude protein determination.

Statistical modelling and decision-making techniques

- General Linear Models
 - ANOVAs, Accumulate ANOVA, Single and Multiple Regression, Covariance Analysis
- Multivariate analysis
 - Principal Components, Cluster Analysis, Discriminant Analysis, Factor Analysis
- Repeated Measurements
- Non-Linear Modelling
 - Log-logistic and Gompertz
 - Curve Comparisons
- Dose Response Curves
- Data Knowledge Discovery and Data Mining Techniques
- Partition Modelling and Decision Tree Classification
- Nominal Regression Analysis
- Forecasting (ARMA & ARIMA)
- Bayesian Inference
- Integer & Dynamic Programming
- System Dynamics & Simulation Modelling.

Experimental design, weed and soil surveys

- Factorial designs under field and controlled environmental conditions (greenhouse and growth chambers)
 - Split-plot and split-split plot
 - Randomized complete block
 - Completely randomised without blocking
 - Unbalanced designs
 - Replacement and additive designs for crop-weed competition studies
 - Weed and soil surveys.

Statistical and other software

- JMP
- SigmaPlot
- Genstat
- Minitab
- SAS
- Instat
- SPSS
- WinBugs
- SigmaScan
- STELLA for **System Dynamics**.

Miscellaneous

- Conference organisation
- Design of commercial surveys, development of survey questionnaires and survey data analysis.