

2022-23 WSSA Standing Committee Report January 2023

Committee Name and Code: Weed Loss Committee (E11)

Committee Chair: Peter Sikkema (C-2023)

Committee Members: Albert Adjesiwor (2027), Anita Dille (2027), Michael Flessner (2027 - Chair), Rui Liu (2027), Mark VanGessel (2027), Joel Felix (2026), Charles Geddes (2026), Nicholas Basinger (2025), Zahoor Ganie (2025), Wes Everman (2024), Peter Sikkema (2024), Nader Soltani (2024), lan Burke (2023), and Sandeep Rana (2023).

Board of Directors Liaison: John Byrd (SWSS Rep)

Committee Members Rotating Off: Ian Burke

New Committee Members in 2023: Joel Felix, Charles Geddes

New Committee Members in 2024: Albert Adjesiwor, Rui Liu

Summary of Past Year's Activities Including:

- Committee goals (2023)
 - Charles Geddes has prepared a manuscript on canola yield loss due to weed interference for publication in Weed Technology target completion: 2023.
 - Zahoor Ganie and Nader Soltani have prepared a manuscript on potato yield loss due to weed interference for publication in Weed Technology – target completion: 2023.
 - Michael Flessner is assembling the data on the impact of herbicide-resistant weeds in corn, soybean and cotton in USA for publication in Weed Technology – target completion: 2023.

Committee accomplishments

This committee has been very active over the past 7 years; the following manuscripts have been published since 2016 (citations are listed in brackets)...

- Soltani, Nader, Anita J. Dille, Ian C. Burke, Wesley J. Everman, Mark J. VanGessel, Vince M. Davis and Peter H. Sikkema. 2016. Potential corn yield losses from weeds in North America. Weed Technology 30: 979-984. (Citations = 162).
- Soltani, Nader, Anita J. Dille, Ian C. Burke, Wesley J. Everman, Mark J. VanGessel, Vince M. David and Peter H. Sikkema. 2017. Perspectives on soybean yield losses due to weeds in North America. Weed Technology 31:148-154. (Citations = 105).
- Soltani, Nader, Anita J. Dille, Robert H. Gulden, Christy L. Sprague, Richard K. Zollinger, Don W. Morishita, Nevin C. Lawrence, Gustavo M. Shatella, Andrew R. Kniss, Prashant Jha and Peter H. Sikkema. 2018. Potential yield loss in dry bean due to weeds in the United States and Canada. Weed Technology 32:342-346. (Citations = 51).
- Soltani, Nader, J. Anita Dille, Darren E. Robinson, Christy L. Sprague, Don W. Morishita, Nevin C. Lawrence, Andrew R. Kniss, Prashant Jha, Joel Felix, Robert E. Nurse and Peter H. Sikkema. 2018. Potential yield loss in sugar beet due to weed interference in the United States and Canada. Weed Technology 32:749-753. (Citations = 22).
- Dille, J. Anita, Phillip W. Stahlman, Curtis R. Thompson, Brent W. Bean, Nader Soltani and Peter H. Sikkema. 2020. Potential yield loss in grain sorghum with weed interference in the United States. Weed Technology. 34:624-629. (Citations = 13).
- Flessner, Michael, I. Ian C. Burke, J. Anita Dille, Wesley J. Everman, Mark J. VanGessel, Breanne Tidemann, Nader Soltani and Peter H. Sikkema. 2021. Potential wheat yield loss due to weeds in the United States and Canada. Weed Technology 35: 916-923. (Citations = 14).
- Soltani, Nader, Charles Geddes, Martin Laforest, J. Anita Dille and Peter H. Sikkema. 2022. Economic impact of glyphosate-resistant weeds on major field crops in Ontario. Weed Technology. 36:629-635. (Citations = 0).
- What was the impact of the committee activities/accomplishments on the following: membership, publication, policy, legislation, and/or education?
 - The committee works on summarizing and publishing the yield loss results for specific crops or groupings. Information has been shared via poster/oral presentations at weed science meetings and published in Weed Technology (please see manuscripts published along with the number of citations above).

WSSA funds requested if any?

Funds are requested to cover the cost of publication in Weed Technology

- Current state of the committee's projects and activities?
- Mid-term goals.
 - 1. Yield and monetary loss due to Palmer amaranth (Dille 2024)
 - 2. Potential yield loss due to weeds in rice (Rana/Everman/Basinger 2024)
 - 3. Potential yield loss due to weeds in cotton (Rana/Everman/Basinger 2024)
 - Potential yield loss due to weeds in vegetables (Ganie/Rana/VanGessel -2024)
 - 5. Potential yield loss due to glyphosate-resistant weeds in Manitoba, Saskatchewan and Alberta (Geddes 2024)

Long-term goals.

- 1. Yield and monetary loss due to waterhemp (Dille/Geddes)
- 2. Yield and monetary loss due to marestail, horseweed, Canada fleabane (Dille/Geddes)
- 3. Potential yield loss due to weeds in peanuts (Everman/Basinger)
- 4. Potential yield loss due to weeds in tree fruit crops apples, pears, peaches, plums, cherries (Basinger)
- 5. Potential yield loss due to weeds due to weeds in perennial grass forages (Basinger, Flessner)
- 6. Potential yield loss due to weeds due to weeds in seedling alfalfa (Basinger, Flessner)
- 7. Potential yield loss due to weeds in vineyards grapes (Basinger)
- 8. Potential yield loss due to weeds in strawberries, raspberries, blueberries, and cranberries (Basinger)
- 9. Potential yield loss due to weeds in almonds (Hansen)

2023 Plan for Committee Activities

Other Goals for the next few years:

Please see above

Plan of Action:

Please see above

Recommendations for Board or Membership Action:

• Funds requested for 2023:

- The committee requests that WSSA pays for the publication charges to publish the manuscripts on yield loss in Weed Technology.
- Other requests for the Board:
 - None