



2021-22 WSSA Standing Committee Report February 2022

Committee Name and Code and Name: Weed Loss Committee (E11)

Committee Chair: Peter Sikkema (C-2023)

Committee Members: Nicholas Basinger (S-2025), Zahoor Ganie (NE-2025), Sandeep Rana (NC-2025), Wes Everman (S-2024), Nader Soltani (C-2024), Ian Burke (W-2023), Anita Dille (NC-2023), Michael Flessner (NE-2023), Peter Sikkema (C-2023), Mark VanGessel (NE-2023),

Board of Directors Liaison: John Byrd (SWSS Rep)

Committee Members Rotating Off and Recommended Replacements: None

Summary of Past Year's Activities Including:

- Committee goals (2022)
 - To continue collect data on crop (potato, rice, cotton, and vegetables) yield losses from as many US states and Canadian provinces as possible across the last 10 years; summarize the impact of weeds on crop yield and monetary loss; prepare manuscripts for publication in Weed Technology – target completion: 2022 (4 manuscripts).
 - Peter Sikkema and Nader Soltani are assembling the data on yield and monetary loss due to glyphosate-resistant weeds in Ontario and Quebec for publication in Weed Technology – target completion: 2022 (2 manuscripts).
 - 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: 2022.

- Committee accomplishments

This committee has been very active over the past 6 years; the following manuscripts have been published since 2016...

- 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 = 129).
- 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 = 78).

- 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 = 39).
 - Soltani, Nade, 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 = 16).
 - 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 = 10).
 - Flessner, Michael, I. Ian C. Burke, J. Anita Dille, Wesley J. Everman, Mark J. VanGessel, Breanne Tidemann, Nader Soltani and Peter H. Sikkema. 2022. Potential wheat yield loss due to weeds in the United States and Canada. Weed Technology XX. XX: XXXX-XXXX (Citations = 3).
- 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 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?
 - Long-term goals.
 - Potential yield loss due to glyphosate-resistant weeds in Manitoba, Saskatchewan and Alberta (Soltani/Sikkema - 2023)
 - Potential yield loss due to weeds in peanuts (Everman/Basinger - 2023)
 - Potential yield loss due to weeds in tree fruit crops – apples, pears, peaches, plums, cherries (Basinger)
 - Potential yield loss due to weeds due to weeds in perennial grass forages (Basinger, Flessner)
 - Potential yield loss due to weeds due to weeds in seedling alfalfa (Basinger, Flessner)
 - Potential yield loss due to weeds in vineyards - grapes (Basinger)

- Potential yield loss due to weeds in strawberries, raspberries, blueberries, cranberries (Basinger)
- Potential yield loss due to weeds in almonds (Hansen)

2022 Plan for Committee Activities

- Other Goals for next few years:

Please see above

- Plan of Action:

Please see above

Recommendations for Board or Membership Action:

- Funds requested for 2022:

- 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