RESEARCH PROTOCOL: HORTICULTURE 2017
Southern Ontario Participatory Pepper Breeding Project

Farmer-researchers
Rebecca Ivanoff, Whole Circle Farm
Greta Kryger, Greta's Organic Gardens
Annie Richard, Patchwork Gardens
Kathy Rothermel, Mouse Seeds at Windkeeper Community Farm

This document outlines the steps that Rebecca, Greta, Annie and Kathy will follow to continue breeding a pepper as part of the Southern Ontario Pepper Breeding Project. It also serves as a Memorandum of Understanding between the farmer-researchers and the EFAO.

Breeding Protocol
We are using mass selection to create a blocky red, early ripening pepper. We will each plant 150 seeds in our greenhouses, we will plant those that germinate out into the field with at least 45 meters isolation from other peppers. We will select peppers from these plants that meet our selection criteria. We will continue to use the record forms created by the Bauta Family Initiative on Canadian Seed Security (below), which includes dates such as dates as when the seeds were sown, first flowers appeared, and first fruit ripened. We will plant out Ace F1 and Aristotle F1 plants as checks to qualitatively how our selection process is progressing. We will keep note the dates on the Bauta forms for the checks as well for quantitative data.

Breeding Form: http://www.seeds.ca/d/?n=seedlibrary/desc/en/Pepper%20Descriptor.pdf

Memorandum of Understanding

Compensation for each farmer-researcher
- Farmer-fee of $500 per farm
  - $250 receivable upon acceptance of this Research Protocol and Memorandum Of Understanding (MOU)
    Acceptance form: https://goo.gl/forms/0wMjDHmoLzRwLJlE3
  - $250 receivable upon remittance of the experimental data and photos, no later than October 31, 2017
- Reimbursement for hotel stay at the Farmer-led Research Workshop, November 28, 2017 in conjunction with the EFAO Conference in Collingwood, Ontario

In addition to the compensation above, the EFAO will
- Help set up Research Protocol, write and post Protocol in the Research Library
Monitor progress of project, including check-ins and help with troubleshooting
Deliver or mail a Farmer-Researcher farm gate sign
Conduct training program related to on-farm research (training webinar link here)
Help analyze data, write and post a Research Report in the Research Library

**Farmer-researchers will**
- Maintain current membership in EFAO
- Establish and conduct experiment as outlined in Research Protocol above
- Record data outlined in Protocol and/or data collection sheet
- Take high quality photos throughout the project
- Keep in contact with EFAO with updates, problems and questions
- Turn in data in a digital format and 3-10 best photos by October 31, 2017
- Complete feedback surveys related to the program
- Provide up to 1 hour of mentoring, including reviewing related protocols in 2017 and/or 2018, and phone consultation with fellow farmer-researchers on related projects.

**If possible, the farmer-researchers will**
- Host a Field Day on their farm or participate in a “Field Day” webinar
- Attend and present at the Farmer-led Research Workshop November 28, 2017 in conjunction with the EFAO Conference in Collingwood, Ontario

**Contact**
Sarah Hargreaves, sarah@efao.ca

**Funding**
Funding for this project was made possible by support from The Ontario Trillium Foundation and the Weston Foundation.