

In cooperation with Ecological Farmers Association of Ontario, **13 ecological farmers** from across the province received funding to conduct **14 research trials** for their farms. Program participation provided them with logistical support and training, a stipend of \$500 and reimbursement for allowable research expenses. For more information on EFAO's Farmer-led Research Program, contact Sarah (sarah@efao.ca).

Livestock

AMENDMENTS FOR PASTURE REGENERATION, [Tony McQuail](#)

Do micronutrient amendments improve pasture growth of rotationally grazed pastures?

- Fertilizer application did not affect biomass estimates in Tony's pastures one year after application; biomass was most affected by field location, or soil patterning in the field.
- Tony sees little value in adding these fertility amendments, which were recommended based on soil testing.

PROBIOTICS FOR PASTURE-RAISED CHICKEN, [Justin Hilborn](#)

Do poultry probiotics affect weight gain or health of pasture-raised chickens?

- Contrary to our predictions, probiotics did not affect mortality rates.
- Justin's attempts to collect a full dataset were foiled so we can't draw conclusions about weight gain.

Horticulture

SOUTHERN ONTARIO RED PEPPER BREEDING PROJECT,

[Rebecca Ivanhoff](#), [Greta Kryger](#), [Annie Richard](#), [Kathy Rothermel](#)

Goal: Early ripening, blocky red bell peppers with good flavour for organic field production.

- Collectively the breeders harvested over 40g of seed from red pepper selections; seeds will be combined and redistributed for another round of mass selection in 2018.
- There is still some variability in plant stature and fruit shape and size, but less than the previous year.

CABBAGE SEED PRODUCTION, [Rebecca Ivanoff](#) and [Nicola Inglefield](#)

How do two methods of cabbage seed production compare with respect to seed quality, quantity and marketable cabbage?

- The Pyramid method performed better than the Chop method both in terms of seed quantity and seed quality and this is because Pyramid produced more seed, not a greater proportion of good quality seed.
- The Chop method produced greater revenue from selling overwintered cabbage at spring markets.
- If high quality seed is the goal, the Pyramid method appears to be better; if net revenue is the goal, then the Chop method is better.

FOLIAR SPRAYS FOR CUT FLOWER PRODUCTION, [Jessica Gale](#)

Does nutrient spray improve length of Sweet Pea?

Does anti-fungal spray improve survivability of Lisianthus?

- The effect of seaweed spray on Sweet Peas varied with developmental stage: Sweet Peas sprayed were longer at peak growth in July, but spray had no effect in August when they are setting seed.
- Disease pressure in Lisianthus was unaffected by the anti-fungal spray.

EFFICACY OF FOLIAR SPRAYS FOR CUCURBITS, Angie Koch

Do nutrient foliar sprays improve plant health and production of summer squash and cucumbers?

- Nutrient foliar sprays did not noticeably impact Brix measurements, disease pressure or length of productive season for cucurbits.
- Moving forward, Angie wonders: Does she need better soil fertility in order for foliar sprays to make noticeable improvement? Was focusing on a crop family susceptible to diseases carried by complex insects just too ambitious - especially in a wet year when diseases spread so easily?

SPRING MULCHES IN GARLIC: CULTIVATION, WINTER WHEAT, HAY, Ken Laing

Is there a difference in labour and/or yield between garlic that is cultivated or mulched?

- There was no difference in garlic yields between cultivation, hay mulch or winter wheat green mulch, and mulching was more labour intensive because Ken couldn't use his root lifter at harvest.
- Field conditions prior to planting had a bigger impact on garlic weight than management!

SPRING PLANTED WHITE CLOVER IN GARLIC, Heather Coffey

Does a spring planted white clover cover crop lead to better garlic yields than standard bare soil beds?

- There was no detectable difference in garlic yield between Heather's control and green mulch plots.
- Clover stayed low enough so as to not compete with the garlic for light, and her results suggest there may not have been nutrient competition either. However, she'd recommend hand weeding clover.

FALL PLANTED OATS IN GARLIC, Eric Barnhorst

Does a fall planted cover crop lead to better garlic yields than standard bare soil beds?

- This fall, Eric planted oats as a cover crop for his 2018 garlic crop. He will compare garlic yield in beds with oats and garlic planted at the same time, staggered planting, and bare soil.
- Look for results next year!

IS COMFREY A COMFY COMPANION FOR SASKATOON?, Pat Kozowyk

Does comfrey promote Saskatoon bush health and fruit production?

- Over their first growing season of the trial, there was measurable growth of some Saskatoon bushes but the growth was not attributable to their comfrey companion.
- Pat will continue to take growth measurements and others over the next few years.

INTERPLANTING ONIONS AND BRASSICAS, Ryan Thiessen

Is onion growth affected by intercropped brassicas?

- The very wet spring resulted in late transplanting dates for onions and root bound transplants.
- Ryan is still working on data collection so results are pending.

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*Protocols and Reports, as they are available, can be found at: efao.ca/research-library
Contact Sarah (sarah@efao.ca) for information about the program.*