

**Project Title:** 2024 Resistance Management of Waterhemp and Giant Ragweed Industry Programs in a 2-Year Corn/Soybean Rotation

**Private Investigator (P.I.):** Next Gen Ag, LLC/Andrew Lueck

**Quarter Report:** #1 May 2024 thru July 2024

**Objectives:** (List project objectives as submitted in final proposal. Describe activity for each during this reporting period.)

1. Collaborate with industry partners to develop competitive two-pass combinations of residual herbicides and maintain 95% waterhemp and giant ragweed control 42 DAB.
  - a. Goal #1: Collaborate with industry partners (8 participants) (Done).
  - b. Goal #2: Successfully apply chemistry (Done).
  - c. Goal #3: Successfully record data and images (Done).
2. Display studies for involved parties at their request.
  - a. Goal #1: Encourage collaborators to visit. (Done).
3. Institute outreach opportunities through;
  - a. Goal #1: Publications; attached with final report and published to my website (Done).
  - b. Goal #2: Outreach opportunities; Jenna went to summer conference, spoke at SMSU plot tour day (Done).

From Portal:

1. GOAL : Achieve 95% control of target weed at soybean canopy.

OBJECTIVE #1: Visually evaluate weed control 14, 28, 42, 56 DAA, and at canopy (Done).

2. GOAL : Feature eight industry partners in each target weed study (Done).

3. GOAL : Provide Multi-Faucet Knowledge Transfer Opportunities

OBJECTIVE #1: Publish an article at year end to my website and supply to MSRPC.

OBJECTIVE #2: Take advantage of in-class and in-field speaking appointments with SMSU (Adam Alford) and MN Growers Ag Expo (MSRPC) (Done).

**Achievements:** (Specific project achievements during this reporting period.)

1. All studies were successfully planted, applied, and completed. These 4 studies have concluded.
2. The both waterhemp and giant ragweed studies turned out well in regards to weed pressure.
3. Rainfall was sufficient for residual activation in 2024 which improved trial quality.

**Challenges:** (Challenges encountered. Specific request for assistance from Production AT on any challenges listed above.)

1. One product removed from an original list tank mix due to incompatibility and nozzle clogging.

**Publications/Symposium:**

1. All publications incomplete and will be included in the Quarter 2 report as separate attachments.

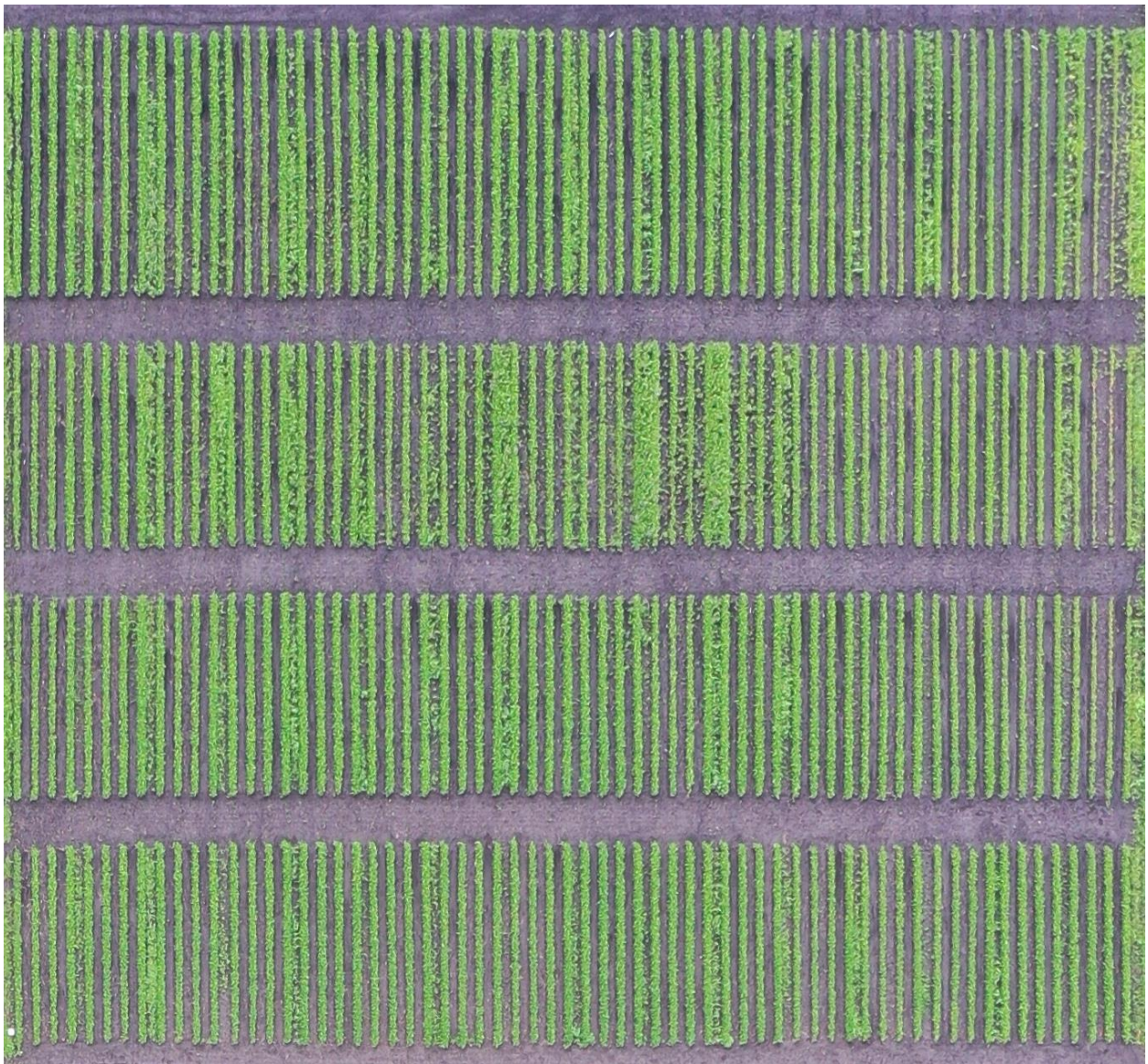
2. Publications posted to Next Gen Ag website that can be accessed through or FB page “Next Gen Ag LLC” in Quarter #2.

**Tech Transfer:** (General audience identification and approximate number attending.)

1. Facebook page followers 123; posts have reached up to 1,200 individuals.
2. Summer conference attended.
3. Spoke at SMSU plot tour day.
4. Anticipate ag expo this winter.

Drone images taken 6-28-24.

Image 1-2. Waterhemp Study Trials Renville, MN. [Soybean top image, Corn lower].



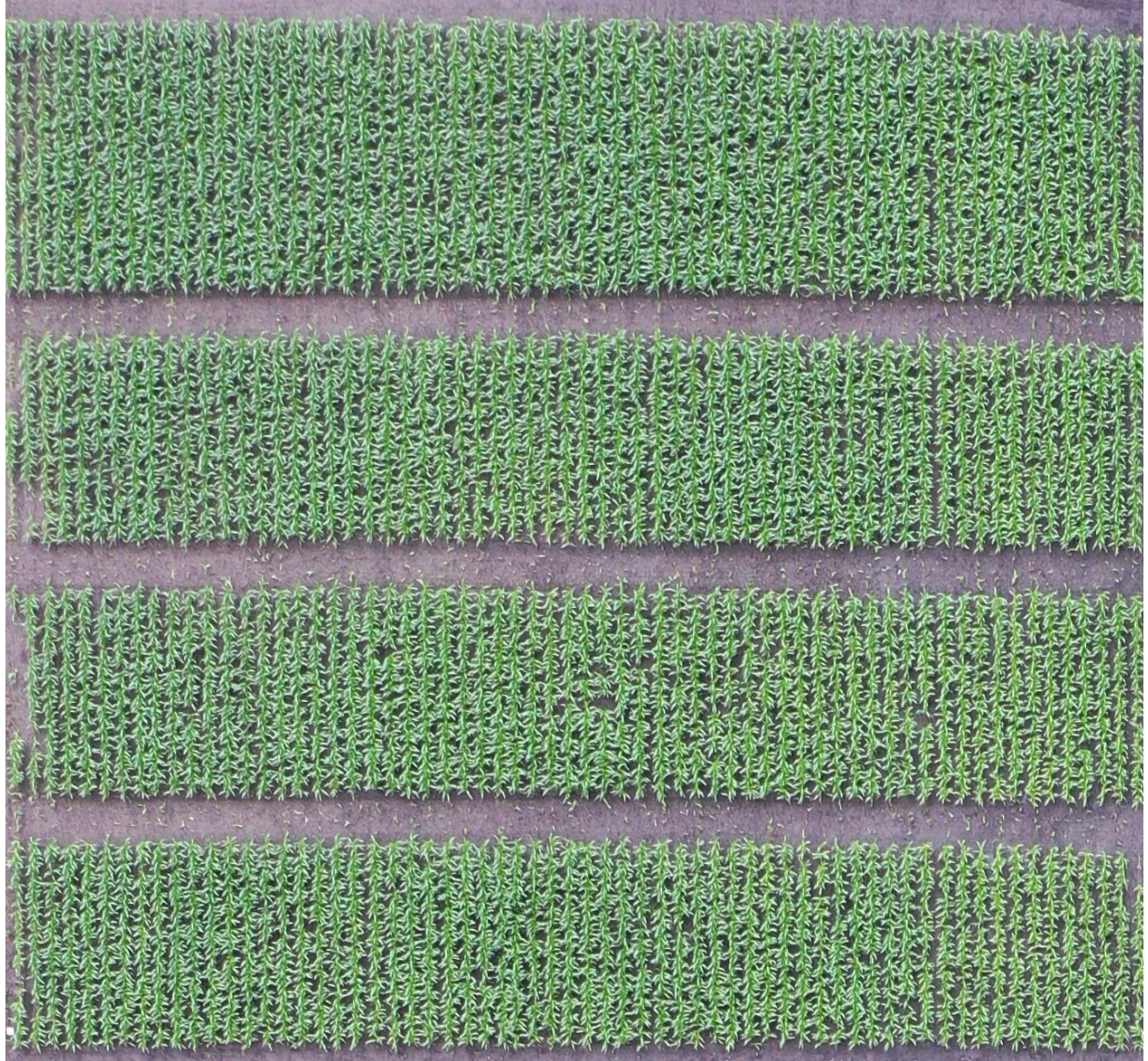


Image 3-4. Giant Ragweed Study Trials Renville, MN. [Soybean top image, Corn lower].



