WORKSHOP: Flame Weeding in Agronomic Crops

Stevan Knezevic

5/15/2012

Full day Workshop, August 15th, 2012, Haskell Ag Lab, University of Nebraska, Concord, NE. *(Concord is located in Northeast NE, 50 miles northeast of Norfolk, & 45 miles west of Sioux City, IA)*

Propane fueled Flame Weeding is an acceptable method of weed (pest) control in organic farming, and is gaining interest among conventional producers due to increases in herbicide resistance and costs of GMO crop seeds.

We will present results from 6-years of research conducted by the team of Dr. Stevan Knezevic (Weed Science) and Dr. George Gogos (Mechanical Engineering). This work is also documented in about 20 scientific publications, 100 abstracts presented at many regional, national and international meetings, and a patent for flaming equipment.

Propane doses for weed control and crop tolerance data will be presented. Four and 8-row commercial type flamers with patented hoods for broadcast and banded flaming will be demonstrated. Inter-row cultivation and intra-row flaming combined in a single operation will also be demonstrated. Several local organic farmers will share their experience.

We will teach you how to do proper flaming to control over 10 major Midwestern weeds in 7 agronomic crops (field corn, sweet corn, popcorn, soybean, sorghum, sunflower and wheat). Workshop is limited to 30 people, at the cost of $100 (lunch provided). Partial scholarships available to certified organic farmers from Nebraska.

For more information contact, Dr. Avishek Data (adatta2@unl.edu), Post Doctoral Research Associate.
Tentative program agenda:

9:30 – 10:00 - Registration

10:00 – 10:15 - Introductions and overview of the program  
(Dr. Stevan Knezevic)

10:15 – 10:30 - Basics of Flame Weeding and Equipment  
(Dr. Stevan Knezevic)

10:30 – 10:45 - Propane dose response for control of various weed species  
(Dr. Avishek Datta)

10:45 – 12:00 - Field Demonstration of Flame Weeding Equipment and Procedures  
(Grad students: Chris Bruening, Strahinja Stepanovic)

12:00 – 1:00 - Lunch (provided)

1:00 – 2:00 - Development of flaming hoods and torches  
(Dr. George Gogos)

2:00 – 2:30 - Crop tolerance to single and multiple flaming  
(Dr. Stevan Knezevic)

2:30 – 2:45 - Break

2:45 – 3:15 - Flame weeding and cultivation in corn and soybean  
(Strahinja Stepanovic)

3:15 – 3:45 - Experience from local producers  
(Randy Fendrich, Larry Stanislav, Mike Ostry)

3:45 – 5:00 - Field Tour of flame weeding research and pertinent discussions

5:00 - Adjourn