

NEW CASH CROPS: FOOD, FEED AND FUEL

Field Day at the UMass Crops Research and Education Farm 89-91 River Rd, South Deerfield, MA Thursday July 16, 2009

Join us for tours of the latest research on vegetable, grain and energy crops, demonstrations of Deep Zone Tillage equipment, and a local-foods supper. If you haven't been to the Research Farm recently, you'll see plenty that's new: new facility, new fields in use, new research directions, and new vision!

12:30 Energy Crops Tour # 1 (see topics, below)

1:30 Deep Zone tillage demonstration # 1. Deep vertical tillage directly below the planting zone breaks the compaction layer, shallow tillage prepares a seedbed in the row. Reduces trips through the field, improves drainage and soil structure, using same planter with reduced tillage. Demo in mature rye, green oats. Chuck Borndt, Cornell Extension and Brooks Finnegan, Unverferth Mftg.
1 contact hour PAT credit will be offered.

2:00 Understanding and Using Combines: Setup, costs, how they work - Small and large combines for soybean, grain corn, sunflower, wheat, rape. Kyle Bostrom, UMass and Arnie Voehringer, NESFI

3:00 Heritage Wheat – Evaluating varieties drawn from gene banks and farmers of the Old and New Worlds for production in New England . Eli Rugosa & R. Hazzard

4:00 Deep Zone tillage demonstration # 2 (see above)

5:00 Supper: burgers, bread and veggies from local sources and unique Brazilian dishes.

6:00 Choose your tour:

1. Energy Crops Tour # 2: cultural management practices including weed management and crops nutrient requirement will be discussed. Stephen Herbert, Masoud Hashemi, Randy Prostack.

1 contact hour PAT credit will be offered.

- **Oilseed Rape:** Growth and N accumulation pattern, yield, and nitrogen use efficiency of 2 cultivars at 2 population densities.
- **Sunflower:** Evaluation of yield and growth of 7 sunflower cultivars.
- **Crambe:** Nitrogen effect on yield performance on differing soil types.
- **Soybean:** Narrower planting rows and higher densities for maximizing seed yield.
- **Grain corn:** Yield performance of 15 shorter-season and full-season hybrids.
- **Switch Grass:** Effect of nitrogen application and time of harvest and affect on re-growth.

2. Vegetable Crops Tour:

- **Ethnic crops: okra, maxixe (spiny cucumber), chipilin (leguminous herb) and taioba** (tropical leafy green). Production and cultural practices, pest management, postharvest strategies, use of high tunnels, and marketing. Frank Mangan & Maria Moreira
- **Ecology of cucumber yield:** effect of cucumber beetle feeding above and below ground on pollinators, mycorrhizal fungi, and yield. Nick Barber & Lynn Adler
- **Organic beetle controls** in eggplant and cucurbits for cucumber, flea and Colorado potato beetles. Andrew Cavanagh, R Hazzard
- **Brussels Sprouts** variety trial for yield and disease resistance. R. Hazzard, Touria Eaton & Michael Rozyne, Red Tomato
- **UMass Student Farming Enterprise.** Amanda Brown, R. Hazzard & students.
- **Roller-crimper timing** to kill cover crops. K. Bostrom & R. Hazzard
- **Edamame** variety trials. S. Herbert, M. Hashemi
- **Pilot study of Chinese medicinal herbs:** feasibility and nutrient needs. Zoe Gardner
1 contact hour PAT credit will be offered

For more information contact 413-545-3696, umassvegetable@umext.umass.edu.



**Directions to the Field Day at the UMass Crops Research and Education Farm
89-91 River Rd, South Deerfield, MA
Thursday July 16, 2009**

Coming north on I-91: Take exit 24, turn right at the end of the ramp, then right again at the light onto Rt. 116. Go about 1.5 miles, through one light. Before crossing the bridge over the CT River, turn left onto River Rd. Pass the Turf Farm and a subdivision. The Crops Research Farm is on the left.

Coming south on I-91: Take exit 25, turn left at the end of the ramp, right at the light onto Rt. 5&10. Go about 1 mile, past one light and turn left at the next light onto Rt. 116. Continue on Rt. 116 through another set of lights. Take a left onto River Rd (before you cross the bridge). End at 61 River Rd. Farm is on the left.

Coming from south of Sunderland on 116: Take 116 into Sunderland center and across the bridge. Turn right on River Rd. End at 61 River Rd. Farm is on the left.