



UP COMING EVENTS **Mark your Calendars**

2008 Winter Onion Meetings



Utah Onion Association **2008 Utah Onion Winter Educational Meeting** is scheduled for Tuesday, February 19, 2008, at the Brigham City Applied Technology Center Conference Room, 325 West 1100 South, in Brigham City, Utah. This year, we are planning reports and discussion on the Onion PIPE research meetings, thrips management and powdery mildew in onions, 2008 Nortron-Prowl herbicide study, IYSV management strategies, and onion variety trials. The meetings will run from 8:00 till 1 pm with lunch afterwards. The cost is \$15 per person. Come spend a day with other onion growers and talk with many of the onion industry representatives who regularly attend our meetings. For those vendors needing display space, please call or email me. For hotels, call the Crystal Inn (phone 435-723-0440) or the Howard Johnson Inn (phone 435-723-8511) in Brigham City for reservations.

Diversified Ag Conference – Come to Cache County (Northern Utah)

For those growers who have attended past Diversified Agriculture conferences, note that this year we will hold our meetings in Logan on the Utah State University campus. We have a good mixture of production, economic, and marketing related subjects that will be very helpful for your farming operations. The 2008 conference is scheduled for February 20-22 at Eccles Conference Center on the Utah State University campus in Logan, Utah. Check out the web site for relevant information and all of the necessary registration information. The half-day workshop on "Developing Business Plans" will be repeated again this year. We are planning workshops on Record Keeping, Starting a New Business, High Tunnels (construction and production), Organic Agriculture, Marketing Plans, and will have tours of many interesting laboratories on campus that help solve Utah farm problems.

It is not that expensive to attend this conference. Registration is only \$60 per person (individual) or \$50 per person (two or more people from the same organization or farm). There is an early bird discount of \$10 per person if you register by February 3, 2007. The registration includes some meals (Wednesday banquet and Thursday & Friday lunch). You will also receive a copy of the conference proceedings. Thanks to some grants and donations from various sponsors, we are able to keep the registration fee well below the true cost of the conference. There is an additional charge of \$10 per person for the pre-conference (8-noon on Wednesday Feb. 20th) business plans workshop. Watch our web site for the listing of events, <http://extension.usu.edu/cooperative/agribusiness/index.cfm/cid.371/tid.762/>.

2007 High Tunnel Research at USU



Small farms are going to be an important part of Utah's agricultural future. However, Utah's limited growing seasons and unpredictable weather make early and late season production of high value specialty crops difficult. In 2005, I received a small grant to begin investigating early and late season production using high tunnels. This work is progressing nicely and additional funding in 2007 from the Western Sustainable Agriculture Research and Education division of the USDA has helped us expand our research efforts to cover additional vegetable research, but also work with small fruits. Several growers have come to Logan to see our tunnels and talk with us about how to integrate high tunnels into their farm operations. Our tunnels are 14 by 40 foot (560 ft²) single skinned structures. We have been growing tomatoes and summer squash in the spring and summer and following those crops with fall grown lettuce, spinach and pak choi. We are investigating the differences between organic and non-organic production practices as well.

Before planting, compost or fertilizer was added to the planting area and incorporated prior to laying plastic mulch. Tomatoes (var. Sunbrite) were transplanted on March 28 and harvest started in late June (2x harvests per week) and ended in early August. Summer squash (var. Gold Rush) were planted on April 18 (spring) and August 18 (fall) with

harvests starting in May and September. Salad crops (spinach, pak choi and lettuce) were transplanted October 4 with the final harvest in mid-November. Lettuce and spinach were replanted on November 19 with intended harvests starting in January 2008.

Table 1 outlines our findings for 2007 and gives some idea of the level of productivity one could expect from these crops grown as organic or using conventional methods (non-organic). Yield is expressed as pound of product per plant for the tomatoes and squash and pounds per square foot of growing area for the different salad crops. Yield of tomato was significantly higher in the organically grown treatments compared to those grown with fertilizer. There was no difference in squash yields between organic and non-organic treatments for the early or late planted crops. Autumn grown salad crops grew better and had a higher final yield when grown under organic production practices at the early and final harvests. These findings are in contrast to those found in 2005 and 2006. In those years, compost additions to the soil did not supply sufficient nutrition to support high yields when tomato, squash or lettuce were grown using organic fertilizer compared to conventional fertilizer. These data suggest that it may take up to three years of compost additions to improve the soil to the point where crop yields can be as good as those where fertilizer is used to supply the nutrient needs of the crop.

Crops	Early Yield (lbs/plant)	Total Yield (lbs/plant)	Harvest Period
Organic Tomatoes	0.58	5.45	June 29-Aug 10
Non-Organic Tomatoes	0.61	3.74	July 3-Aug 10
	ns	**	
Organic Summer Squash (spring)	0.23	1.17	May 18-Jun 29
Non-Organic Summer Squash (spring)	0.19	1.18	May 18-Jun 29
	ns	ns	
Organic Summer Squash (fall)	0.28	0.91	Sept 4-Oct 30
Non-Organic Summer Squash (fall)	0.31	1.00	Sept 4-Oct 30
	ns	ns	
Organic Spinach	0.09	0.51	
Non-Organic Spinach	0.05	0.27	
Organic Pak Choi	0.22	1.90	
Non-Organic Pak Choi	0.19	1.35	
Organic Leaf Lettuce	0.14	0.90	
Non-Organic Leaf Lettuce	0.07	0.38	

ns = not significantly different; ** = significantly different from each other.

- Early tomato yield equals the first six harvests.
- Early squash yields equal the first five harvests.
- Leafy yields are the weight per sq. ft. at 3 weeks (Oct 25) and 6 weeks (Nov 16) after transplanting
- not applicable or of value.