

Hiring Sources

Jayne Sojka

As we slip into our spring season one question that I get asked often is, "Do you know of anyone that needs a job?" "We are hiring but have a hard time finding someone that will commit to the entire summer."

One of the sources that many of you may not be aware of is a College Campus. Students need

Internships to graduate and many of them look for postings on campus. If you find that you would like to have someone that has knowledge of soils for example, perhaps you could call the UW Stevens Point campus and ask for a professor in the soils department. All you have to do is express interest and ask if the job could be posted.

The sky is the limit...you don't have to even focus on a specific area of interest as all students need to experience what **IS** available in the **REAL WORLD** before they find their niche in life. Some of my best experiences with interns had originally focused their attention on general biology but after a year of IPM redirected their final years of college. An INTERN has to commit to work or they will NOT get college credit for that internship. For example: One of my interns' paid \$960.00 for 3 college credits to work with our team for the summer. We did evaluations of that work that was performed and also requested a final paper about what they actually learned thru this experience. It can be rewarding to both parties and perhaps you may find a "FULL" time employee when everything is said and done.

Make a call.....

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UW Campuses & Information:

- UW Madison: 608-263-2400
- UW Stevens Point: 715-295-8999
- UW River Falls: 715-425-3911
- UW Stout: 715-232-1122
- UW Eau Claire: 715-836-2637
- UW Platteville: 608-342-1491
- UW Oshkosh: 920-424-1234
- UW LaCrosse: 608-785-8000

Technical colleges will have job postings as well

UW-Extension Cranberry Specialists

Jed Colquhoun UWEX Fruit Crops Weed Scientist 1575 Linden Drive Madison, WI 53706 (608) 890-0960 jed.colquhoun@ces.uwex.edu	Amaya Atucha Extension Fruit Crop Specialist UW-Madison 297 Horticulture Building 1575 Linden Drive Madison, WI 53706 (608) 262-6452 atucha@wisc.edu
Patty McManus UWEX Fruit Crops Specialist & Plant Pathologist 319B Russell Labs 1630 Linden Drive Madison WI 53706 (608) 265-2047 patty.mcmanus@ces.uwex.edu	Shawn Steffan Research Entomologist USDA-ARS UW Madison, Department of Entomology 1630 Linden Drive Madison, WI 53706-1598 (608) 262-1598 steffan2@wisc.edu
Christelle Guédot Fruit Crops Entomologist/ Pollination Ecologist Department of Entomology 546 Russell Laboratories 1630 Linden Drive Madison WI 53706 (608) 262-0899 guedot@wisc.edu	Juan E. Zalapa Research Geneticist 299 Horticulture 1575 Linden Drive USDA-ARS Vegetable Crops Research Madison, WI 53706 (608) 890-3997 jezalapa@wisc.edu

Integrated Cranberry Crop Management for Wisconsin



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Address Correction

If you have any address corrections, additions, or deletions, please let us know.

If you prefer to receive the CCMJ newsletter by e-mail, please call 715-421-8440 or e-mail: adarr@co.wood.wi.us

Thank you!

Matthew Lippert
Agriculture Agent
Wood County Courthouse
400 Market Street
Wisconsin Rapids, WI 54494
(715) 421-8440
mlippert@co.wood.wi.us
Editor

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Sparganothis Fruitworm Degree-Day Benchmarks Provide Key Treatment

Timings for Cranberry IPM

Shawn Steffan & Annie Deutsch

USDA-ARS

Department of Entomology, University of Wisconsin



The minimum temperature on a given day (horizontal bar in the look-up table) will intersect with a maximum temperature (vertical bar in the look-up table) for that day. Where these intersect, there is a DD value. This value is the DD accrual for that day. Growers can keep a running total of these DDs for their marshes, and when the running totals reach certain bench-

Degree-day benchmarks— indicate discrete biological events in the development of insect pests. For the Sparganothis Fruitworm, we have isolated the key development events and linked them to **degree-day (DD) accumulations**. These degree-day accumulations can improve treatment timings for cranberry IPM programs in spring and summer.



(see DD Benchmarks table below), the grower will know the current developmental status of the *Sparganothis* population on their marsh.

All degree-day accumulations begin on March 1st, and from this point forward, the **male flight** can be expected to start around **596 DD**. The females can be expected to lay the **first eggs** of the generation by **681 DD**. The **male flight** should be half over by **884 DD**. The first caterpillars can be expected to hatch out by **895 DDs**, and this will continue through **1,890 DDs**. With these key benchmarks, growers can plan to time their pest control tactics to hit adults, eggs, or caterpillars.

Growers simply need to keep track of their own daily maximum and minimum temperatures on the marsh. With these maximum and minimum temperatures, the handy "Degree-day Look-up Table for Sparganothis Fruitworm" can be used to determine the daily accrual of degree-days.

Sparganothis Fruitworm Degree-Day Benchmarks Provide Key Treatment Timings for Cranberry IPM continued from p.

Shawn Steffan & Annie Deutsch
USDA-ARS

Department of Entomology, University of Wisconsin

Degree-day Look-up Table for Sparganothis Fruitworm

Lower threshold: 50°F Upper threshold: 86°F Intermediate cut-off

		Minimum temperature																							
		15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	
Maximum temperature	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	52	0	0	0	0	0	0	0	0	0	0	0	0	1	2										
	55	1	1	1	1	1	1	1	1	1	1	2	2	3	5										
	58	1	2	2	2	2	2	2	2	2	3	3	3	5	6	8									
	61	2	2	3	3	3	3	3	3	4	4	4	5	6	8	9	11								
	64	3	3	4	4	4	4	4	4	5	5	6	6	8	9	11	12	14							
	67	4	4	5	5	5	5	5	6	6	6	7	8	9	11	12	14	15	17						
	70	5	6	6	6	6	6	7	7	7	8	8	9	11	12	14	15	17	18	20					
	73	6	7	7	7	7	8	8	8	9	9	10	11	12	14	15	17	18	20	21	23				
	76	8	8	8	8	9	9	9	10	10	11	11	12	14	15	17	18	20	21	23	24	26			
	79	9	9	9	10	10	10	11	11	12	12	13	14	15	17	18	20	21	23	24	26	27	29		
	82	10	10	10	11	11	12	12	12	13	14	14	15	17	18	20	21	23	24	26	27	29	30	32	
	85	11	11	12	12	12	13	13	14	14	15	16	17	18	20	21	23	24	26	27	29	30	32	33	
	88	12	12	13	13	13	14	14	15	15	16	17	18	19	21	22	24	25	26	28	29	31	32	34	
	91	13	13	13	14	14	14	15	15	16	17	17	18	19	21	22	24	25	27	28	29	31	32	33	
	94	13	13	13	14	14	14	15	15	16	17	17	18	20	21	22	24	25	26	28	29	30	31	32	
97	13	13	13	14	14	14	15	15	16	17	17	18	19	21	22	23	25	26	27	28	29	30	31		
100	13	13	13	14	14	14	15	15	16	16	17	18	19	20	21	23	24	25	26	27	28	29	29		
103	12	13	13	13	14	14	14	15	15	16	17	17	18	20	21	22	23	24	25	26	27	28	28		
106	12	12	13	13	13	14	14	14	15	15	16	17	18	19	20	21	22	23	24	25	26	26	27		
109	12	12	12	12	13	13	13	14	14	15	15	16	17	18	19	20	21	22	23	24	25	25	25		
112	11	11	12	12	12	12	13	13	14	14	15	15	16	17	18	19	20	21	22	23	23	24	24		
115	10	11	11	11	12	12	12	13	13	14	14	15	16	17	18	19	20	21	21	22	22	22	22		

DD Benchmarks

(accrued from March 1st)

Flight starts: 596

Egg-laying: 681

Peak flight (midway): 884

End of egg-laying: 1,634

Larval emergence: 895 – 1,890

Questions can be directed to Shawn Steffan, USDA-ARS Research Entomologist, Dept. of Entomology, UW-Madison: steffan@entomology.wisc.edu

Cranberry Cold Hardiness

Amaya Atucha

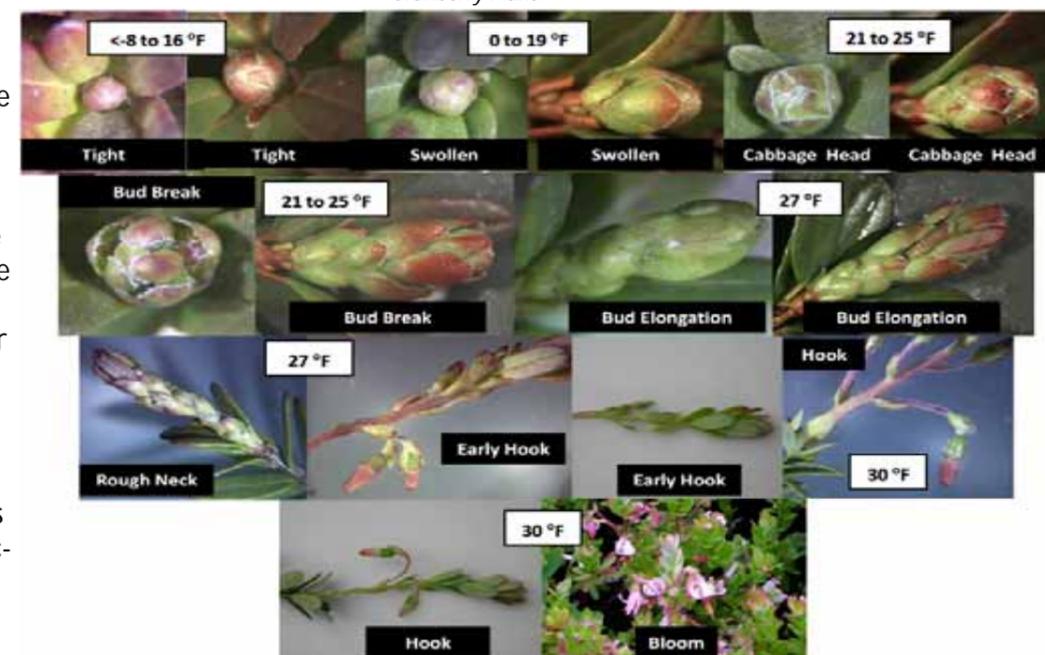
UWEX Fruit Crops Specialist

As spring progresses and cranberry vines start to come out of dormancy we begin to get increasingly worried about frost/freeze damage. Because we cannot yet see any visible growth or changes in buds development, it is very hard to predict how much cold the vine can tolerate. A recommended practice during this time is to monitor changes in vine's pigmentation, and the development and coloration of the terminal bud. These signs can give us an indication of changes in cold hardiness as well as clues that the vines are becoming more active and thus becoming more sensitive to cold. However, tolerance to cold changes as the vines become more active with higher temperature during the day, and vines declimate at a faster rate as the daily temperature rises.

The first step to consider when frost/freeze protecting is to determine at what bud stage your vines are, and based on the critical temperature recommendation for each bud stage decide at what temperature you are willing to go before protecting. The general recommendation is to start the irrigation system when the temperature is above 4 °F the critical temperature is of most importance, because the application of water on the plant tissue causes a temporary decrease in tissue temperature due to evaporative cooling (the water is evaporating by absorbing heat from the air and plant tissue). The dryer the air, the greater the temperature fall when you start to irrigate. How dry the air is dictates when you turn the system on. This can be calculated from the dew point, which is measured with a wet bulb thermometer or a sling psychrometer.

During the week of April 20, as we experienced a couple of nights with temperatures dropping to 17 °F in some growing areas, several growers decided to flood as a protection method. After removal of the flood, cranberry buds will probably be more sensitive to cold than if they had not been flooded, because the water temperature is warmer than the air temperature and buds loss their cold tolerance faster under the warmer water. A flood shorter than 1-week should have a minimal impact on frost tolerance (bud protection should be based on appearance). For floods that last longer than 1 week, the critical temperature—the temperature at which buds can be killed—will probably be higher than what is recommended for protection at a given bud stage (see Figure 1).

Figure 1. Development stages of cranberry bud during spring growth and minimal survival temperature for each stage. Source: *Workmaster, Beth Ann A., and Jiwan P. Palta. "Frost Hardiness of Cranberry Plant."*



Wiping weeds in cranberries: What's allowable in Wisconsin?

By Jed Colquhoun and Jack Perry

UW-Madison

The persistence of those pesky maples and other tall weeds in Wisconsin cranberries has spurred a number of questions about wiping weeds. Unfortunately, the herbicide labels can be quite confusing and differ among trade names when it comes to specialized application techniques like wiping.

Here are a couple general aspects that need to be considered prior to loading the wiper:

1.) **Not all glyphosate product labels include cranberries or wiper applications, so read carefully!**

2.) **Glyphosate labels for the many products available differ greatly in whether a surfactant is allowed or not in wiper applications.** Many (but not all) say: "Do not add surfactant to the herbicide solution when using a wiper applicator". This varies by product, often based on the surfactant system that is already with the herbicide in the container. Again, please read the label carefully!



The research that we've described at field days and at Cranberry School is designed to collect data that supports expanding herbicide and surfactant wiper weed control options in the future. The early results of this work are encouraging and we will further expand our efforts in the 2015 growing season. In the meantime, please be sure to follow the current labels.

We thank you for your support of our work and look forward to seeing you around the marsh soon!

Jed Colquhoun and Jack Perry, UW-Madison

Select Max herbicide for control of Sweet Vernal grass

by Suzanne Arendt

RedForest Crop Consulting, LLC

Sweet vernal grass (SVG) is a perennial grass found increasingly in cranberry marshes. This grass emerges very early in the spring and in most years control measures need to take place in late April and early May. By the time the sweet vernal grass is above the cranberry vines, it is nearing seed formation and control will be very limited. Scouting early for this pest is necessary to obtain management of this weed. In the central growing region, SVG had already emerged prior to flooding of cranberry beds the week of April 20th. A couple days after flood waters have receded, growers could target this weed. The weather forecast for the week of April 27th, looks to be good for growing and for spraying.

BIZARRO FACTS:

- Sweet vernal grass was historically used as a flavoring agent because of its vanilla like aroma. In Russia, it was used in the manufacturing of special brandy.
- It is dangerous for consumption!
- Cows feed hay made from sweet vernal grass caused weakness, breathing problems and hemorrhage followed by death.
- There is a high coumarin content in svg, which can interfere with clotting.
- Don't try to whistle with a blade of this grass!

Select Max label information for cranberry

PHI: 30 days

RATE:

Annual grasses 9 to 16 fl oz

Perennial grasses 12 to 16 fl oz

Adjuvant Recommendation NIS at 0.25% v/v

Special Use Instructions and Restrictions for

Cranberry:

- Do not apply more than 16 fl oz/A in a single application. Do not apply more than 64 fl oz/A (0.5 lb ai/A) per season. Do not apply between the "hook" stage and full fruit set. For repeat applications make on a minimum of a 14 day interval.
- Do not apply if rain is expected within 1 hour of application, as control may be unsatisfactory.
- Do not apply when conditions are favorable for drift (high temperatures, drought and low relative humidity), especially when sensitive plants are located nearby. • Do not spray if wind speed is 10 mph or greater. If sensitive crops or plants are downwind, extreme caution must be used under all conditions.

- Do not spray if winds are gusty.

Follows WPS 40 CFR 170



Anthoxanthum odoratum

