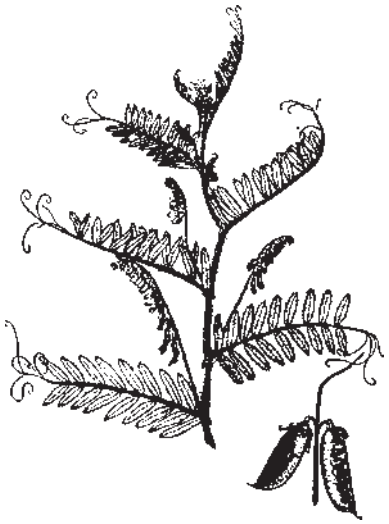
RUTGERS COOPERATIVE EXTENSION AT THE NEW JERSEY AGRICULTURAL EXPERIMENT STATION

PLANT & PEST ADVISORY

FRUIT EDITION $1.50 AUGUST 5, 2003



INSIDE

Stinger Labeled for Strawberries

Bradley A. Majek, Ph.D., Specialist in Weed Science

Stinger has received a 24C Special Local Need label in New Jersey for weed control in strawberries. The weeds controlled by Stinger fall into two botanical plant families, composites and legumes. Common composite weeds found in strawberries include **Canada thistle** and other thistles, **goldenrod** species, **aster** species, common **dandelion**, **mugwort** (wild chrysanthemum), **horseweed** (marestail or stickweed), **galinsoga**, and **ragweed** species. Legume weeds include **vetch** species and **clover** species.

The labeled rate of Stinger for use on strawberries is one-third of a pint (0.125 lb ai/A) in the spring, and two-thirds of a pint per acre (0.25 lb ai/A) after harvest, but the rate needed also varies on the target weed species. Two fluid ounces per acre (0.047 lb ai/A) will control seedling annual weeds such as common ragweed, annual vetch, and galinsoga. Three to four fluid ounces per acre (0.070 to 0.094 lb ai/A) are needed to control perennial clover species. Most other susceptible perennial weeds require the full rate of one to two thirds of a pint per acre (0.125 to 0.25 lb ai/A).

Optimum results controlling deep rooted and hard to control perennial weeds, including Canada thistle, perennial asters, goldenrod species, and mugwort (wild chrysanthemum) will be obtained if the Stinger application is split. Apply one-third of a pint per acre Stinger before or as the weed emerges in the spring. Maintain a 30-day PHI (PreHarvest Interval). Some weeds can "survive" for months on established existing foliage even though Stinger suppresses all new growth. Apply Stinger before weeds establish a foliage canopy in the spring.

The spring application of Stinger timed to match the emergence of the perennial weed in the spring coincides with the time of year when the carbohydrate food reserves in the plant are at the lowest point. Treatment at this time reduces the weed's chance of recovery and survival.

Apply another one-third pint of Stinger in early summer after harvest. No growth of the target weed may be observed at the time of the second application. Spray the second application even though no growth of the target weed is evident. The second application is essential to the elimination of the hard to kill established perennial weeds. If the second application is skipped, expect to see the weed re-emerge in late August or September. Do *not* exceed two-thirds of a pint of Stinger per acre in one year.

SEE STINGER ON PAGE 2

Botrytis Control of Wine Grapes

Wayne Wilcox, Ph.D., Cornell University Plant Pathology

Source: Alice Wise, Cornell Cooperative Extension, Long Island from Mark Chien's e-mail Newsletter.

According to grape pathologist Dr. Wayne Wilcox, "Veraison" is approaching rapidly and weather conditions continue to be ideal for Botrytis. Unless the climate changes radically and swiftly, I'd strongly recommend a specific Botrytis fungicide on susceptible varieties once berries reach this stage of development. Although we continue to examine the benefit of earlier-season sprays, the utility of an application at veraison is widely acknowledged in humid climates such as eastern North America and northern Europe. Interestingly, the standard control program in the Champagne region of France (arguably the Botrytis capital of the world, virtually nothing but Chardonnay and Pinot Noir, and worse weather than ours!) calls for three fungicide applications: at bloom, bunch closure, and veraison. Note that they do not make an additional fungicide application for Botrytis control after veraison. We haven't examined this program locally, although we will.

A quick review of the viable options: 1) Rovral. This has been the workhorse of Botrytis control programs since the early 1980's. Resistance has developed in many regions after such intensive use, and we have both anecdotal and experimental evidence to suggest that resistance is compromising control in a number of vineyards in our part of the world (e.g., several years ago in a commercial Chardonnay vineyard on Long Island, Alice Wise got poor control with four sprays of Rovral but excellent control with two sprays of Vangard). The good news is that resistant Botrytis strains are weaker than their sensitive counterparts, so their numbers decline from one year to the next provided that you stop spraying Rovral and allow the sensitive strains to take over. Once the resistant strains have declined sufficiently, experimental evidence and experience suggests that it should be possible to make one application per year without running into further trouble. Bottom line: do not depend on Rovral if it has been used very intensively in the recent past. Give it a rest this season, and then consider working it into future rotations for a maximum of one spray per year. However, if you have avoided Rovral for several seasons, it may be a useful tool in the schedule.

2) Vangard. This is unrelated to any other fungicide available in North America. It has been the most consistent performer in our Botrytis control trials. Vangard is absorbed into the berries, so it's rainfast and has limited post infection activity. I haven't seen any data showing improved performance by adding an adjuvant, and we saw no such benefit in the one year where we tested this product with and without a nonionic surfactant. Vangard is highly prone to resistance development, so its use should be strictly minimized. The label allows a maximum of two applications per season, but I'd rather see it held down to a single spray each year.

3) Elevate. This product also is unrelated to any other on the market. Our results with it have been good, but a little more erratic than with Vangard. Elevate is retained within the waxy cuticle of the berries, so it is rainfast within a few hours after its application (lab studies show 50% retention within 3 hr and 75% retention within 24 hr). It is strictly a protectant fungicide, without post infection activity. It does not appear to be as prone to resistance development as Vangard, but there is a resistance risk. The label allows a maximum of three applications per season, but European guidelines recommend just one, in rotation with unrelated materials.

Final word: Cultural controls (canopy management, leaf pulling, and nitrogen moderation) are critical components of Botrytis control programs, as are fungicides in a wet year. We're extremely fortunate to have two new effective fungicides in the tool chest, but each will get burned out if you rely upon it too heavily. "Rotate these three materials regularly and keep them all alive." (WFW)

Note: Chardonnay clusters, in particular, set almost too well. Many selections at the research vineyard are already very compact. This will complicate Botrytis control if the weather is uncooperative as it inhibits spray penetration and inhibits drying of clusters after a rain. Thus, cultural controls mentioned above may factor heavily this year into which blocks succumb and which do not. (AW)

Submitted by Jerome L. Frecon, Agricultural Agent. ❑

STINGER FROM PAGE 1

Stinger is both a postemergence foliar absorbed herbicide and a residual herbicide. The initial twisting and curling observed after application to susceptible species is due to the foliar absorbtion. Control of established perennials is due to residual Stinger in the soil which prevents regrowth from the roots. In certain species such as mugwort, Stinger prevents regrowth but does not kill the mature leaves. Apply Stinger in the spring before mugwort establishes a foliage canopy, or control existing foliage with another weed control technique.

- Do *not* apply Stinger in a hand held sprayer used to "spray until wet". Stinger is a residual herbicide that must be applied on a rate per acre basis. When treating "patches" of perennial weeds, apply the recommended rate per acre with a calibrated sprayer. Treat ten to fifteen feet beyond the weed "patch" on all sides. Spray the sod adjacent to the weed "patch" in the tree row.
- Do *not* use a surfactant or any other type of additive with Stinger when treating strawberries.
- Do *not* tank-mix Stinger with any other herbicide labeled for use on strawberries.
- Maintain a *30-day PHI* (PreHarvest Interval).

For a copy of the label, visit the Rutgers Cooperative Extension label page at: http://www.rce.rutgers.edu/labels. ❑

Apple Summer Disease Update

Dave Rosenberger, Ph.D., Specialist in Tree Fruit Plant Pathology, NYAES, Hudson Valley Lab

Reprinted from SCAFFOLDS Fruit Journal, Geneva, NY Volume 12, No. 21, August 5, 2003, Cornell Cooperative Extension.
http://www.nysaes.cornell.edu/ent/scaffolds/

Wet postbloom weather, along with hot wet weather during July will probably make this a memorable season for development of summer diseases on apples in New York, New Jersey, and New England. Summer diseases include **flyspeck, sooty blotch, black rot, white rot, and bitter rot.**

Flyspeck

Flyspeck ascospores are released shortly after apples reach petal fall. On apples, the fungus requires roughly 270 hours of surface wetting time between early season infection and the time that symptoms become apparent on fruit. In the northeastern United States, we are still uncertain of the exact details concerning disease development on apples. However, I believe that infection of fruit by ascospores is relatively unimportant in commercial orchards because our scab fungicides effectively protect fruit during the interval after petal fall.

Ascospores are probably very important for generating new infections in woods and hedgerows that border orchards. If we assume that infections on these other hosts (of which there are many) develop at approximately the same rate as infections on apples, then those infections should also become visible and begin producing conidia for secondary infections after approximately 270 hr of surface wetting. The conidia are far more abundant than ascospores, and conidia can blow into orchards from the border areas.

During a dry summer, the secondary infection cycle may not begin until early September and most infections that occur on apple fruit in September will not have enough time to develop visible symptoms before fruit are harvested. During wet summers such as the one we are currently experiencing, secondary infections on fruit can be initiated much earlier and symptoms on unprotected fruit will become visible during late summer. A wet summer may also allow multiple secondary cycles, thereby dramatically increasing inoculum that is available to blow into orchards during late summer.

Petal fall on McIntosh in the Hudson Valley occurred around 12 May this year. Peak ascospore discharge for flyspeck presumably occurred about 10 days later. A flush of symptoms from those late June infections should appear on unsprayed apples within the next few days because we are nearing the completion of another 270-hr wetting accumulation (counting from 23 June).

The standard recommendation for controlling flyspeck in the northeast has been a combination of a benzimidazole fungicide (currently, Topsin M is the only choice) plus captan. However, research conducted over the past several years has shown that Sovran and Flint are at least as effective as Topsin+Captan, and that in some cases they are more effective. Sovran and Flint are more expensive than the Topsin+Captan combination, but this may be a year where one or two applications of Flint in August might pay dividends, especially if one adds the potential benefits that Flint sprays may have for **bitter rot** control.

Bitter Rot

Bitter rot is a sporadic disease in the northeastern United States. We have not really had weather favoring bitter rot since the early 1990's. Bitter rot can be caused by several species of *Colletotrichum*. Infections occur during hot wet weather and often appear as decays on the sun-facing cheek of ripening fruit. Decays are tan and slightly sunken. Slimy pale orange spores may be evident in the center of fruit lesions during wet or humid weather. In North Carolina and other southern states, bitter rot spreads rapidly and can cause major losses within several weeks if fruit are not protected with fungicide during late summer.

The life cycle for bitter rot in the Northeast has not been adequately studied. I have noted the following scenarios for development of bitter rot under New York conditions:

1. Unsprayed fruit have no symptoms at harvest but develop bitter rot lesions if fruit are incubated at 100% relative humidity until they become senescent. This suggests that the fungus is often present on unsprayed fruit, but that it usually cannot cause decay until fruit become senescent.
2. The disease appears only on a few fruits near the orchard borders just prior to harvest. This occurs some years in my fungicide check plots where no fungicides are applied throughout the summer, but I rarely find more than 1-2% of fruit affected.
3. The disease may invade fruit after harvest and appear as a postharvest decay. In apple storage surveys conducted during the mid-1990's, we found that bitter rot accounted for 13% of the postharvest decays in one apple packinghouse in 1995.
4. Very rarely, bitter rot can become epidemic. This occurred in Michigan in 1995 (see Jones & Shane, Plant Disease 80:1294-1297). Annual epidemics occurred in one Long Island orchard during the early 1990's.

Why does bitter rot act so differently in different orchards and different years? No one knows, but all of the following are probably factors:

a. Inoculum levels probably vary greatly from year to year. In the Long Island case, we eventually discovered that horse chestnut trees (*Aesculus hippocastanum)* and sycamore maples (*Acer*

See Apple Summer Disease on page 4

APPLE SUMMER DISEASE FROM PAGE 3

pseudoplatanus) adjacent to the affected orchard were severely affected with *Colletotrichum acutatum* and were probably supplying inoculum for the orchard. The role of non-orchard hosts in the bitter rot cycle has not been investigated elsewhere in the northeast.

b. The time when inoculum becomes available is probably critical for infections in the northeast. Bitter rot infections occur best under hot, wet conditions. If inoculum does not reach orchards until September, it may be too cool for rapid development of infections.

c. Bitter rot is favored by long, warm wetting periods. Severity increases with duration of wetting up to 60 hr. In the northeast, we rarely have long wetting periods during August when temperatures are high enough to favor bitter rot infection.

So why be concerned about bitter rot this year? Extended wetting during May and June promoted bitter rot infections in non-orchard hosts. I have noted that horse chestnut trees in the Hudson Valley are already turning brown due to disease, something that has not happened in recent years. (Diseases other than those caused by *Colletotrichum* are also involved in blighting of horse chestnuts.) The hot, wet weather of the past week is likely to have allowed extensive dissemination of bitter rot spores in the Hudson Valley, and early ripening cultivars are already showing some evidence of infection at the Hudson Valley Lab.

Only two fungicides provide good activity against bitter rot at this time of year: Captan and Flint. However, captan must be applied at the maximum label rate, half-rates will not prove satisfactory. Heavy rains can presumably remove captan residues more easily than Flint residues because Flint tends to bind to the waxy cuticle of the fruit. Thus, Flint might perform better if our frequent rains continue. Either captan alone or Flint alone should provide adequate protection against bitter rot in most orchards. However, where extremely high disease pressure is expected (e.g., adjacent to wood lots or to known source trees such as horse chestnut), growers may wish to apply a combination of Flint at the full rate plus captan at one-half of the full label rate.

Neither fungicide is known to have post-infection activity against bitter rot, so timely protectant sprays are essential.

Sooty Blotch, Black Rot, and White Rot will all be controlled by sprays applied for flyspeck and bitter rot. However, given the wet conditions this summer, the interval between the last spray and harvest may need to be shortened to prevent late season infections by black rot and white rot.

Honeycrisp is especially susceptible to black rot and white rot, so this cultivar will need careful protection during August. ❑

Rhizopus Rot Management for Peach and Nectarine

Norman Lalancette, Ph.D., Specialist in Tree Fruit Pathology

In New Jersey, the **brown rot** pathogen, *Monilinia fructicola*, is usually the only fungus that needs to be controlled during the preharvest ripening period of peach and nectarine. Another fungal fruit rot that can develop at this time, **Rhizopus rot**, only occurs sporadically in the field and is usually most problematic during postharvest operations. However, frequent rains throughout this growing season have resulted in the development of Rhizopus rot in some orchards prior to harvest. These same conditions also readily remove protectant fungicide residues and make timely applications difficult.

Causal Agent

Rhizopus rot is caused by one or more species of the fungal genus *Rhizopus*, the principal pathogen being *R. stolonifer*. Infected fruit can be identified by a mass of white cottony mycelium that turns jet black as spores are formed. The fruit skin slips easily on the surface as the fungal enzymes degrade and soften the flesh, often resulting in a rather soupy mess. In contrast, brown rot infections are much firmer, and sporulation of the fungus results in a gray to tan appearance. Fruit infected with Rhizopus rot are usually found on the orchard floor, although we have observed them in the canopy on trees at the Rutgers Agricultural Research and Extension Center (RAREC) in Upper Deerfield. Given their black appearance, they are easy to spot.

If a significant number of *Rhizopus* infected fruit are observed in the orchard, then inoculum (spores) may already be present on many of the maturing fruit. However, unlike *M. fructicola*, these *Rhizopus* spores cannot directly invade fruit tissue. They require some form of injury, however slight, in order to infect. Thus, prevention of injury, as from insects, becomes imperative for both Rhizopus and brown rot control during the preharvest ripening period.

Preharvest Control

All cultivars are susceptible to Rhizopus rot. The current standard fungicide prescribed for control is Botran 75-W at 1.3 to 5.3 lb/A. Higher rates of this material are recommended when disease pressure is severe, as when rotting fruit are present in or near the orchard; pay particular attention to already harvested neighboring blocks. Since Botran does not provide adequate control of *M. fructicola*, it should be used *in addition* to the fungicide currently being applied for brown rot control. Application timing is the same as for brown rot, although note that Botran has a 10-day preharvest interval.

Efficacy data comparing various fungicides for

SEE RHIZOPUS ROT ON PAGE 7

Fruit IPM

Dean Polk, Fruit IPM Agent

Peach

✔ **Oriental Fruit Moth (OFM):** Trap counts have increased over much of the southern counties. Growers should maintain insecticides in their mix through this period. Also, growers should be aware that frequent hard thunderstorms will wash any recently applied pesticide from the trees. While the first of 2 sprays was applied last week in southern counties, a second spray would be due around 8/10-12. However, given the recent hard rains, growers should maintain frequent insecticide applications through the entire degree day "bracket" of 2100 to 2650 DD. We are now at 2400 DD in southern counties. We are at 2321 DD in central counties, and at 2100 DD in northern counties. Alternate middle sprays applied every 7 days MAY NOT be adequate if applied between frequent heavy rains. We have previously seen damage under these conditions, and more frequent applications may be needed.

✔ **Tufted Apple Budmoth (TABM):** Trap counts have increased statewide as 2nd generation timing is upon us. In southern counties, alternate middle sprays should be applied now and again on 8/13-14. If using conventional materials in full cover sprays, the first application is due around 8/9. Effective materials in the "conventional class" include Spintor and the pyrethroids (and the B.t.s with very good coverage). Full rates of Lannate will suppress TABM populations. However, caution should be used in the face of frequent rains (see above on OFM). If using Intrepid, then use 2 complete sprays around 8/11-12 (2355 to 2435 DD or 20-30% egg hatch) and again at 2665 to 2740 DD or 60-70% egg hatch. We are at 2190 DD in southern counties, 2020 DD in central counties, and 1836 DD in northern counties.

✔ **White Peach Scale (WPS):** Peter Shearer reports that summer generation crawlers have been sited in research blocks at the Rutgers Agricultural Research and Extension Center (RAREC) in Upper Deerfield. While most growers largely eliminated their scale problems with earlier sprays, some pockets of WPS may still be around. If you have a known problem with WPS then now is the time to spray. Diazinon is effective for scale control and has a 21 day PHI. Provado also controls scale crawlers but the label only specifies "San Jose Scale". There is a "0" day PHI.

✔ **Brown Rot and Rhizopus Rot:** Both these diseases can be found in ripening fruit, especially nectarines. Growers who are using Indar should be aware that the label also calls for a spreader/adjuvant to be used with the material. Other materials include Elite (some Rhizopus activity), and Orbit. However consistent use of SI materials is not a good idea for resistance management. Consider alternating with Abound or Flint, which are also good brown rot materials. The addition of another material for Rhizopus may be needed. See the accompanying article by Norm Lalancette for a more complete discussion.

Apple

✔ **Tufted Apple Budmoth (TABM):** Please see peach section above.

✔ **Codling Moth (CM):** The second of 2 CM sprays (conventional materials) was due this past weekend in southern counties. Given the hard rains, growers will need to reapply any recently sprayed insecticide. Treatments are also due in central and northern counties. Treatment for this generation is critical if you don't want wormy fruit. Make sure not to cut rates and reapply under frequent and hard rains. If using Assail, Confirm or Intrepid then sprays should be applied at 1200 and again at 1450-1500DD or slightly earlier than with conventional materials. Timing is past in southern and central counties, but we are at 1445DD in northern counties, thus still in the time bracket for these newer materials. Low rates of Intrepid have not worked well in the past. Consider mid to upper label rates if affordable.

✔ **European Red Mite (ERM) and other mites:** We have had reports of some miticides not working as well as expected. In the absence of predators, miticides should ALWAYS be applied in full cover sprays. If you have recently used (last year or this year) low rates of Pyramite, consider changing to another material such as Savey (28 day PHI) or Apollo (45 day PHI) if not applied earlier in the season. Acramite is a new material and can be applied at .75-1 lb/A. It has a 7 day PHI, and should be used with an organosilicone adjuvant such as Silwet, Silgard, or Kinetic. If not recently used, Kelthane may still be effective at the higher rates. In the face of reports about Pyamite inconsistencies, growers may want to stay away from the lowest label rate, and bring the use rate closer to 6+ oz/A.

✔ **Summer Diseases:** Please see the accompanying article by Dave Rosenberger in New York. In New Jersey, we have had anywhere from 750 to 950 hr of leaf wetting since petal fall. This is far more than adequate to give use **sooty blotch** infections. See recommendations in accompanying article.

Blueberry

✔ **Aphids:** Aphid levels have decreased since last week, and dropped to being found in 42% of samples (down from 60% the previous week). Infestation levels at over 10% of terminals infested also dropped from 22% to 10%.

✔ **Leafrollers:** Almost half of our sample sites continue to show leafroller injury, mostly old feeding. While the actual level of injury is light, the feeding signs are common. Beating tray samples show that 7% of samples are positive for live worms (down from last week). While sprays have been applied by some growers, the timing for this is largely over.

See IPM on page 7

Early Midseason Peach Varieties Under Test

Jerome L. Frecon, Agricultural Agent

There are many varieties that mature in this season. It seems like the ones that are very productive are more challenging to size. If you don't know, large peaches (2 ¾") peaches are the ones to have.

Blazingstar (FA 12) – A medium-large sized, globose, attractive, bright scarlet red skinned, firm, semi-freestone peach ripening about August 4 in 2003. Some fruit have raised sutures. The tree is vigorous and productive, with low susceptibility to **bacterial spot**. This variety has more color but was not as large as Redhaven in 2003.

Flamin Fury #PF 15A – A medium sized, globose, very attractive 60-80% crimson red skinned, firm, semi-freestone peach that ripened on August 2, 2003. Prominent to slight sutures. The tree is vigorous and very productive, making it a challenge to thin and get a high percentage of large fruit. Size was disappointing in 2003.

Fruit Acres 53 –A large sized, globose, attractive, 50-70% scarlet red skinned, firm, semi-freestone peach that ripened on August 2, 2003. The crop was not as heavy as most varieties so the size was large to very large (see picture). The tree is vigorous, usually productive and tolerant to bacterial spot. **Blazingstar, Starfire** and **Redstar** are all Fruit Acres selections in this general season.

Jersey Flamin Fury PF#14 – A medium-large sized, globose to ovate, bright, 60-80% crimson red skinned with a yellow-orange undercolor, firm, freestone peach ripening about August 6, 2003. Size is much better than FF#15 A, with 90% of the fruit above 2½ inches in diameter, however 2nd generation trees in the Daretown block were not large size in 2003. Tree is vigorous, spreading, and productive, with low susceptibility to **bacterial spot**.

John Boy – A medium-large to large sized, globose, attractive, 60-70% bright crimson red skinned over yellow-green undercolor, firm, semi-clingstone peach that will peak about August 6. Tree is similar to Loring being very vigorous but more productive, with moderate susceptibility to **bacterial spot**. This is the premium-sized peach in this season.

Paul Friday .088 – A medium large, globose, attractive 70-80% crimson red skinned over reddish yellow undercolor, firm, semi-freestone, ripening about August 4, 2003. This is a nice peach that looks similar but with a little more color to about 5 other Paul Friday selections in this season. The tree is vigorous, very productive with no observable **bacterial spot**.

Redhaven – Still the standard of yellow-fleshed, semi-freestone peaches in this season. Ripened on July 31 in 2003. Tree is vigorous and always productive, with moderate susceptibility to **bacterial spot**. Size was outstanding in 2003 but not as red as some other selections.

Topaz – An old variety, medium-large sized, globose, beautiful, orange scarlet red, firm, semi-freestone, ripening about August 2 in 2003. Topaz has a history of setting light crops of fruit. The tree is vigorous and spreading, with low susceptibility to bacterial spot. It is certainly attractive in 2003.

USDA BY 96P2531 – A medium- large sized, ovate to globose, very attractive 70-90% crimson red-skinned over a yellowish red undercolor, very firm, semi-freestone peach ripening about August 3 in 2003. The tree is very vigorous, productive, and tolerant of **bacterialspot**.

Other varieties in this general season that are suggested but not in our test blocks are **Starfire, Redstar, Jim Dandee, Bellaire, Salem and Late Sunhaven or Redhaven Special.** ❑

RHIZOPUS ROT FROM PAGE 4

control of Rhizopus rot are far from complete, partly due to the sporadic occurrence of the disease. However, in a recent study at the RAREC, the fungicide Elite 45DF was observed to provide excellent control of *both* Rhizopus rot and brown rot when applied at 8 oz/A at 22, 13, and 4 days preharvest. At harvest, Rhizopus and brown rot control with Elite was 100% and 94%, respectively, versus 58% and 89% control for Indar 75WSP at 2 oz/A. (In this study, Induce at 8 fl oz/100 gal was added to the Elite, while Latron B-1956 at the same rate was added to the Indar.) In addition to controlling both diseases, Elite has a 12 hr REI and 0-day PHI, allowing it to be applied up to the day of harvest.

Postharvest Control

Good disease control begins in the field, but it must be followed by as good a control during the postharvest packing and shipping period. Wet conditions result in more field infection which in turn results in greater quantities of inoculum present on fruit during postharvest. Any bruises or cuts occurring during sorting and packing could be invaded by *Rhizopus* species as well as by the omnipresent *M. fructicola*.

The new postharvest fungicide Scholar 50WP is registered and recommended for application on the packing line. Fortunately, this reduced-risk material can provide adequate control of both brown rot and Rhizopus rot; it also controls **gray mold**, although this disease is not common on New Jersey peaches and nectarines. As always, packers should follow application instructions on the fungicide label. ❑

IPM FROM PAGE 5

✔ **Anthracnose:** Samples of Bluecrop that had been collected from each participating grower were incubated between 7/15 to 7/20. The average anthracnose level found after 1 week incubation was 11% infected berries. This compares to 5% infected berries in 2002 and 15% infected berries in 2001. Actual field infection rates in 3rd pick Bluecrop and Elliott were a high of 5% and being found in 31% of samples (up from 17% of samples last week). Therefore, anthracnose is still a significant pest and treatments will continue to be needed on late fruit.

New Jersey Pesticide Applicator Website Keeps You Current

Patricia Hastings, Program Associate, Pest Management

Not sure if you are in compliance with the new pesticide applicator regulations? Check out the Rutgers Cooperative Extension Pest Management Office 'Pesticide Applicator Training' web page at: www.pestmanagement.rutgers.edu/PAT. The purpose of these pages is to provide information and tools to meet the November 2001 licensing requirements for New Jersey commercial and private applicators. It is a good resource for those seeking a license for the first time, as well as those that wish to keep their certification and license current.

For licensed applicators, it offers the current schedule of recertification training courses in New Jersey. Further, there are links to easy-to-use templates for required pesticide application record forms. These templates incorporate all of the 'new' record-keeping requirements of the revised regulations. Remain in compliance with these easy-to-use tools. ❑

Insect Trap Captures

Tree Fruit - Southern Counties

Week Ending	LPTB	PTB	OFM	TABM-P	AM	CM	DWB	OFM-A	STLM	TABM
7/18	38	11	10	2	0	0.5	7	8	1370	1
7/25	19	15	14	4	0	1	0	6	1099	2
8/1	23	14	23	16	0	5	35	24	1996	6

Northern Counties

Week Ending	LPTB	PTB	OFM	TABM-P	AM	CM	DWB	OFM-A	STLM	TABM
7/18	1.5	0.3	7.0	9.0		2.0	12.5		453.6	8.9
7/25	0.9	0.4	6.1	3.3	0	2.2	4.3		224.8	2.2
8/1	1.6	1.0	7.0	1.4	0	4.5	3.5		753.6	1.0

Blueberry - Atlantic County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
7/18	.02	46.4		0.23	2265	0.31
7/25	0	9.9		0.22	1306	0.31
8/1	0	25.6		0.11	717.5	0.17

Burlington County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
7/18	1.5	11.3		2.13	855.7	0.14
7/25	0	1.5		0.88	716.6	0.08
8/1	0.09	0.4		0.28	296.8	0

Rutgers Cooperative Extension - NJAES
U.S. DEPARTMENT OF AGRICULTURE
Rutgers - The State University of New Jersey
Plant & Pest Advisory
18 College Farm Road
Cook College
New Brunswick, N.J. 08901-8551

FIRST CLASS
POSTAGE PAID
PERMIT #576
MILLTOWN, NJ 08850

PLANT & PEST ADVISORY

FRUIT EDITION - CONTRIBUTORS

Rutgers Cooperative Extension Specialists
Robert Belding, Ph.D., Pomology
George Hamilton, Ph.D., Pest Management
Norman Lalancette, Ph.D., Plant Pathology
Sridhar Polavarapu, Ph.D., Entomology
Peter W. Shearer, Ph.D., Entomology
NJAES/Cook College
Joseph Goffreda, Ph.D., Breeding
Rutgers Cooperative Extension Agricultural Agents and Program Associates
Atlantic County, Gary C. Pavlis, Ph.D. (609-625-0056)
Gloucester County, Jerome L. Frecon (856-307-6450)
Hunterdon County, Winfred P. Cowgill, Jr. (908-788-1338)
Morris County, Peter J. Nitzsche (973-285-8300)
Warren County, William H. Tietjen (908-475-6505)
Fruit IPM, Dean Polk (609-758-7311)
Meredith Compton, Program Associate (908-788-1338)
Gene Rizio, Program Associate (856-566-2900)
David Schmitt, Program Associate (856-307-6450)
NJAES Sustainable Agriculture Coordinator
Olga Wickerhauser
Newsletter Production
Jack Rabin, Associate Director for Farm Services, NJAES
Cindy Rovins, Crop Management Communications Editor

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