

# PLANT & PEST ADVISORY

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## Brown Rot Part V: Integration & Disease Control

*Norman Lalancette, Ph.D., Tree Fruit Pathology*

In New Jersey, or for that matter the eastern U.S., management of the fruit rot phase of brown rot requires the application of fungicides. Some time during ripening we know the weather will be favorable for disease, and that sufficient inoculum will be available for infection. The real questions are what to spray, when to spray, and how often.

The calendar approach (see part III) is probably the most common method for determining the timing and number of sprays to apply. It's easy to use, especially when you have many varieties maturing at different times. And in most seasons, the calendar approach will provide acceptable disease control.

However, this series on brown rot is not about "most seasons" or "acceptable control." Many growers can remember seasons in which they did everything right, but still got significant levels of brown rot! This series has been about the other factors - inoculum level, susceptibility in relation to ripening, and environment - that, in addition to your spray program, *also* affect the final level of disease in the orchard.

### ◆ Integration: Spray Timing

As soon as fruit begins to ripen, typically at first color, it will become susceptible to infection. So, for any given variety, shouldn't this be the time to apply the first preharvest spray? Not necessarily. Remember, the inoculum level and environment are also key in determining if infection takes place.

If the inoculum level for an orchard is considered high (see parts I and II), then the risk is too great to delay the first spray. However, if very few or no inoculum sources can be found after careful observations, then consider delaying the first spray based on weather forecasts for rain. Rain provides a mechanism for disseminating spores via splashing, as well as providing free water for spore germination.

Note that delaying the first or subsequent sprays does not mean applying a fungicide *after* a rain event. When a weather front is predicted to pass by in three days, it is time to spray now. Of course, one must also be able to cover all the allotted acreage in the time allowed prior to the rain.

There's nothing magical about using this approach; it's just common sense. By using information about inoculum level and weather fore-

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casts, we can possibly delay and/or stretch out our applications, thus saving sprays. But conversely, we are just as likely to be applying *extra* sprays. And in this latter case, we're preventing significant loss.

Timing sprays based on information about inoculum level and weather forecasts provides two benefits. First, by incorporating these factors, we lessen the risk of "surprise disease years." We get consistent results, year after year. Secondly, we use the fungicide most efficiently. When applied just prior to infection, the fungicide will be present at the highest concentration when it's needed the most. This translates into the greatest control for the amount of money invested.

### ◆ What to Spray

To determine which fungicides provide the best brown rot control, I examined the results of ten different fungicide field tests conducted in 1993 and 1994. These studies were performed by various university researchers in six different states in the eastern U.S. In all tests examined, the fungicides in question were commercial formulations used at recommended labeled rates. Non-treated controls ranged from 17% to 100% of the fruit infected.

The results of this survey show that the fungicides Indar, Rovral, and Orbit provided consistent brown rot disease control at harvest and at 2-5 days postharvest. The newly registered fungicide Elite was in only two of the studies, but also showed similar control potential.

Captan and Nova were also included in a number of the studies. These materials often provided control equal to those above, but did not provide consistent control, especially with respect to postharvest disease development. Indar, Orbit, and Rovral gave the best overall postharvest control, even when disease was assessed at 6-8 days after harvest.

Since control capabilities are similar, other factors need to be considered in choosing a material. Cost is an obvious consideration. Another factor is ability to apply up to harvest. Indar, Orbit, and Captan have a 0 PHI, while Elite, Rovral, and Nova have a 7 day PHI. Ronilan and Funginex were not in any of the surveyed studies, but have PHI's of 14 and 0 days, respectively.

One final note on choice of materials. There are a number of excellent materials available for preharvest sprays, but none for postharvest control of brown rot. As indicated earlier this year, Rovral has lost its label for postharvest application. However, any older Rovral can still be legally used after harvest. Therefore, given the current lack of postharvest fungicides for brown rot, growers are urged to save their older Rovral for this use and apply one of the other materials in the orchard. □

## Plant Growth Regulators to Manage Apple Harvest

Winfred P. Cowgill, Jr., Hunterdon County Agricultural Agent

Pre harvest drop, especially of summer apple cultivars and McIntosh, remains a major concern. In New Jersey NAA is our only fully labeled "stop-drop" material or "sticker". I will be reporting on a new stop-drop product at the end of this column.

The following information on NAA and growth regulator management is courtesy of Dr. Ed Stover, Dept. of Horticultural Science, Cornell University, NYSAES, Hudson Valley Lab, Highland, NY. It is reprinted from the NY State Extension Fruit News.

"NAA treatment is most effective when applied before serious drop begins. Shaking branches to look for loosening of fruit will signal the need for either rapid harvest, or NAA application. Harvest should typically occur within 610 days of application. If further delay is necessary, an increase in drop should trigger repeat application. Fruit are growing about 1% per day, so harvested crop will not be reduced until more than 1% of the fruit drop daily.

At its most effective, NAA reduces drop to 10-30% of losses from untreated trees. Conditions conducive to severe drop reduce effectiveness. Use of 10 ppm or less reduces the risk of fruit softening, but only slows drop significantly in one out of two or three years. 20 ppm NAA may be more consistently effective, but at greater risk of softening.

Some growers have adopted the strategy of applying Ethrel about two weeks prior to normal harvest to accelerate ripening and color development. This permits harvest before significant drop occurs and provides fruit for early sales, but there are significant dangers. Ethrel can also be used later where color development is inadequate. Color enhancement by Ethrel is always won at the risk of premature softening. Extreme care and cooperative weather are necessary to use this material without compromising fruit quality. The lowest rates and time to harvest that achieve satisfactory color should be used. Rates higher than 150 ppm should be avoided and harvest should occur within 5-7 days of application. Rapid cooling after harvest is essential to prevent runaway ethylene production and premature softening of fruit in market channels.

If Ethrel is applied too early, there will be little effect from treatment. High temperatures after application will also result in little coloring, but drop and loss of firmness will still be accelerated. NAA at 10-20 ppm should be included with Ethrel to control fruit drop.

Several growers report that harvest five days after

# Procedure for Propagating Peach Trees by Semi-Hardwood Cuttings

*Jerome L. Frecon, Gloucester County Agricultural Agent*

1. Prepare the following ahead of time: a) the rooting medium consisting of vermiculite or perlite and peat (equal parts by volume); b) moisten and place this in flats or boxes about 2-3 inches deep; c) mist watering system in a location protected from wind and direct sunlight, but well ventilated.

2. Collect current season shoots from early to mid-August that have grown 8 to 10 inches long and are about pencil thickness. Shoots 15 to 18 inches can be cut in half. Terminal shoots root better than basal or medial shoots. Avoid green, succulent shoots.

3. Keep shoots moist and place basal ends in a bucket of water while and after cutting.

4. Remove all leaves except 4 or 5 on the terminal end of the shoot. The leaves can be stripped off rapidly rather than cut off. Keep all cuttings shaded and moist.

5. Make up an I.B.A. (indolebutyric acid) rooting solution at 2500 ppm concentration. I.B.A. formulations can be purchased from horticultural suppliers. (Two and one half gallons dissolved in 1,000 milliliters of water equals 2500 ppm).

6. Cut about 1 inch of the bark off the basal end of the shoot on two sides. Dip this wounded end into the solution of I.B.A. for five seconds.

7. Place the cuttings in the rooting medium and start the misting. *Do not crowd the cuttings.* Space them at least one inch apart.

8. Set the misting system at intervals of five seconds on every five minutes during daylight hours. An automatic timing device can be used to regulate the misting. *Do not mist during the night.* Frequency of misting can be reduced as the temperature drops and humidity increases.

9. Make good drainage holes in the flats, pots, or beds. Overwatering with poor drainage will rot the cuttings and result in early leaf drop.

10. *Do not remove the cuttings for one month.* Rooting will begin in two to three weeks. The cuttings must remain in the rooting medium, disturbing them will break off roots and cause heavy losses.

11. Turn off the mist after one month. Keep the cuttings moist by watering with a mist nozzle once or twice a week.

12. Apply a soluble fertilizer once or twice before the end of October. Most of the leaves will have fallen by mid-November.

13. Place the boxes of cuttings in storage for the winter at 40-50° F before mid-November or before prolonged freezing temperatures.

14. Cuttings should be planted in pots or bags and grown in the greenhouse until about late May when they can be set out in the field. Young dormant cuttings can be lined out in the field in early spring to produce "field" grown trees: Cuttings can be planted in any sterilized mix. Success has been achieved with biodegradable pots and plastic, one gallon bags with the bag cut away from the root ball at planting. □

# A New Tool for Tufted Apple Bud Moth Control

*Peter W. Shearer, Ph.D., Tree Fruit Entomology*

The US EPA has recently granted a Section 18 Emergency Exemption label for the use of Confirm 2F (tebufenozide) for tufted apple bud moth (TABM) control on apple in certain New Jersey counties. The Section 18 label use of this material is limited to Burlington, Salem, Atlantic, Camden, Cumberland, and Gloucester counties. This label came just in time for applications against the second generation of TABM.

Confirm 2F is a new class of insecticide that mimics a natural insect molting hormone. When the target lepidoptera insect ingests Confirm, it causes a cessation of feeding within 24 hours, in addition to causing the insect to undergo a premature molt. Death occurs in about 3 to 7 days as a result of starvation and desiccation. This material does not have contact action; Confirm 2F must be ingested to be effective.

There are several key points for usage that are detailed on the Section 18 label and, of course, usage must be consistent with the label. These include, but are not limited to:

- Rate is 18 fluid ounces/Acre.
- Maximum of 4 applications (only 1 or 2 applications are needed for second generation TABM).
- Minimum of 100 gallon spray volume.
- Apply as a complete spray.
- The use of LATRON B-1956 is required to maximize coverage.
- Preharvest interval is 14 days.
- Reentry interval is 12 hours.

The first application made against the second generation of TABM should be timed at about 20-30% egg hatch (2350-2450 DD after biofix) followed by a second application at about 60-70% egg hatch (2670-2740 DD). Confirm is also effective against codling moth but not against apple maggot. Therefore, applications of Confirm 2F should be applied with an additional apple maggot control material. □

# Extension Pesticide Report

George Hamilton, Ph.D., Pesticides

*Excerpted from the Plant & Pest Advisory Extension Pesticide Report, August, 1996*

## ◆ EPA Issues Two Amendments to WPS

EPA is issuing two final amendments to the Agency's Worker Protection Standards for agricultural pesticides. The amendments will make the standards more practical and flexible for states and farmers to implement while maintaining safeguards for agricultural workers.

The first amendment decreases from 30 days to seven days the time during which decontamination supplies (soap, water, paper towels) must be available to workers entering fields when low toxicity pesticides are used. Low toxicity pesticides are those which have restricted entry intervals of four hours or less. Until now, the standards required decontamination supplies to be available whenever a worker performed any activity in a pesticide-treated area or where entry had been restricted within the past 30 days.

The second amendment allows employers to replace the Spanish language on required warning signs with the language most often used by workers in that location. The English portion of the sign must remain. The standards require posting of warning signs that are visible from all usual points of worker entry into the treated areas. Also, as part of the second amendment, EPA is permitting the use of smaller warning signs in nurseries and greenhouses. Signs of approximately four and one-half by five inches can be used if the distance between signs is 25 feet or less; signs of approximately seven by eight inches can be used if the distance between signs is 50 feet or less.

The two amendments will go into effect 60 days after publication in the Federal Register, which is expected by the start of July.

## ◆ Special Local Needs Registration

**Bravo Ultrex and Bravo Weather Stik:** On July 1, 1996, The New Jersey Pesticide Control Program granted ISK Biosciences Corp. a special local need registration for Bravo Ultrex and Bravo Weather Stik on peach and nectarine trees for the control of peach, nectarine scab.

## ◆ Recertification Units Restored For Five-Year Private Applicator Licenses

In response to requests by farmers, the Pesticide Control Program has extended the license registration period to five years. Those private applicators whose licenses expired September 30, 1995, should have received license renewals showing an expiration date of October 31, 2000. This extension of the registration period should help cut down on the paperwork and time involved in renewing the license annually.

To further simplify the process, the five-year recertification period for all currently licensed private applicators was made to coincide with the new five-year registration period. This means that all currently licensed private applicators automatically became recertified on November 1, 1995, regardless of when they received their original certification. When an applicator starts another recertification period, recertification units are automatically reset to zero. The renewal bill sent with the license will show this. However, all units that have been accumulated through September 30, 1995, will be restored to each private applicator's file before the end of this year. *You will not lose any recertification units.*

The PCP will be sending applicators the Recertification Update Form which will show the number of recertification units currently on file and how many more units, if any, will be needed for recertification. These forms will be mailed later in the year. If you have any questions, please call the PCP at 609-530-4070. (Source: Pesticide Control Report, NJDEP/PCP)

## ◆ New Private Pesticide Applicator Training Manual

This is only for private applicators who need to be certified for the first time, not commercial applicators.

There is a new manual for PRIVATE pesticide applicator certification called PRIVATE (which combines the CORE & Private Part 2). The price of this PRIVATE manual is \$15.00.

All PRIVATE applicators who need to be certified for the first time will no longer be required to take the CORE and the Private Part 2 exams. They will instead take one exam called PRIVATE.

Their license will be renewed every 5 years. For recertification they will need 8 CORE credits and 16 Private Parts 2 credits.

Please call your County Cooperative Extension office for these manuals.

PLEASE NOTE: Private applicators who also do commercial work are not certified as PRIVATE applicators. They are certified as COMMERCIAL applicators; and, therefore, they need to take the CORE and their CATEGORY exams not the PRIVATE exam. □

Ethrel application, followed by rapid cooling and CA storage, permits storage of fruit into February with acceptable quality. Our preliminary studies suggest that this may be true under appropriate conditions but earlier harvest resulted in significantly smaller fruit. We also need to recognize that Ethrel drift onto adjoining blocks may accelerate ripening and increase variability in maturity."

Last year in New Jersey AVG (Aminoethoxyvinylglycine) was tested under an Experimental Use Permit in a commercial orchard and at the Rutgers Snyder Research and Extension Farm as ABG. It will be tested more extensively this year (with pears as well as apples) under the trade name Retain. Abbot Labs is expected to have a full label for Retain in 1997.

In 1995 on a block of Mac Spurs/MM106 in North Jersey we observed a significant reduction of fruit drop (25%) on the ABG-3168 treated trees, even though the trees were severely drought stressed. Harvest was delayed. Maturity was delayed 7 days and fruit firmness was enhanced.

In our trial at the Snyder Farm (Hunterdon County) AVG delayed harvest in 'Liberty/M26' by 8 days. Fruit drop was greatly enhanced over the control. Fruit firmness was also significantly enhanced when measured on November 17 out of storage. This is due to the inhibition of ethylene synthesis.

AVG/Retain shows tremendous promise as a stop-drop material in NJ. Up to ten acres will be treated this growing season under the Experimental Use Program.

Dr. Stover also offered the following comments in his article:

"Initial data suggest that conditions which increase drop on untreated trees will reduce the effectiveness of this material (AVG/Retain).

The Retain label will specify a 50 g a.i./acre maximum rate. Smaller trees are likely to show greater drop control since response is probably related to concentration applied on a tree row volume dilute basis. However, good results have been reported for trees ranging from M.9 to seedling size with great response of seedling trees in the Champlain Valley. Use of an appropriate surfactant is vital to achieving the best results.

Starch hydrolysis and flesh softening are also delayed by AVG so application to a portion of a farm's acreage may extend the harvest period. Increased fruit size may be realized since fruit are still growing actively, however, we need to be cautious in delaying harvest since we don't know how this practice will affect fruit quality out of storage. Improved maintenance of fruit firmness is often reported following AVG treatment.

A delay in red color development is sometimes observed after AVG treatment since this compound slows all ripening processes. In most years this effect has been minor in Retain trials, but is likely to be more pronounced where coloring conditions are poor. Use of Retain on highly colored strains and/or delay of harvest may overcome this problem. Proper use of Ethrel following Retain treatment looks promising, but effects on fruit quality need to be thoroughly examined.

Judicious use of plant growth regulators on selected orchard blocks can help us schedule harvest for more efficient labor use, optimize harvested yield, and increase overall orchard profitability." □

## Fruit IPM

Week Ending 8/9/96

Dean Polk, IPM Agent - Fruit

### ◆ Apple

**European red mite (ERM):** Populations have decreased to below treatment levels on most farms. Where populations still exist, predators are at sufficient levels to control ERM.

**Spotted tentiform leafminer (STLM):** Adults continue to emerge for the third flight. Several farms have had mine counts above treatment level. Lannate applied for TABM control (see below) will also control STLM adults and newly emerging larvae. Do not apply Vydate or Provado at this time, even if mine counts are above treatment levels. These systemic materials attack primarily new sap feeding larvae, which will be the principle stage present in about a week to 10 days.

**Tufted apple budmoth (TABM):** Second flight adults continue to emerge (see trap counts). We are now in the third week of emergence. Eggs are being laid and larvae are starting to hatch. First instar larvae were seen Monday on peaches in the Richwood area. A total of 4 alternate middle sprays are suggested with Lannate forming the base of the spray program. Degree day counts suggest that the first sprays were due during the first few days of August with the second spray coming about August 10 (southern counties). The second spray should coincide with 25-30% egg hatch. The third and fourth sprays should coincide with 50-55, and 75-80% egg hatch respectively. The amount of first generation injury can be used to define the farm as a high risk or low risk farm for second generation injury. Most growers may not want to tolerate over 2 to 3 % first generation damage. One farm in Burlington County had 12% damage from the first generation. Where TABM is a problem Lannate @ 1 to 1.5 pt/A + an O.P. is suggested (Guthion @ .5 - .75 lb/A or Lorsban 50W @ 1 to 1.5 lb/A or Imidan @ 1 to 1.5 lb/A). In problem orchards the 1.5 pt/A rate is suggested, applied in at least 100 gal of water per

SEE TABM ON PAGE 6

**TABM FROM PAGE 5**

acre, depending on tree size. Treatments should be applied every other middle about every 7 days. If significant rainfall occurs immediately after application, then re-application is suggested. Another effective treatment is to use the new product, "Confirm." Please see article on the section 18 label for this product.

**Sooty blotch and Fly speck:** Suggestions for summer disease control were mentioned in last week's edition, and referred to some of the work done at the Hudson Valley Lab by Dr. Dave Rosenberger. I would like to add to those thoughts from Dr. Rosenberger's recent article in SCAFFOLDS: "...Regular fungicide sprays are required to provide protection. Where Benlate is used in combination with ziram or captan, a full cover spray should provide protection for 21 days or 3.5 inches of rain, whichever is shorter. A Benlate cover spray will generally be effective for a minimum of 14 days under even the most adverse conditions, so the recommended summer spray interval in a year like this is 14-21 days. Even the best-timed fungicide program will not protect fruit if spray coverage is incomplete (as in poorly pruned trees, trees with heavily clustered fruit, or where sprays are applied under windy conditions)."

◆ **Peach**

**Oriental fruit moth (OFM):** Third flight OFM adults

have decreased some since last week, and show low levels on most farms. Second brood larvae are present in some peaches, with damage showing up in Redhaven and Topaz post harvest samples. Since we don't want to see any OFM fruit damage, growers who have OFM fruit damage should check sprayer calibration, coverage, and insecticide rates.

**Tufted apple budmoth (TABM):** See apple section for TABM summary. **Lorsban 50W is not labeled for peach use.** Otherwise all suggestions for apples apply to peaches and nectarines.

**Fruit rots: Brown rot** is at very low levels, even with the heavy amounts of rainfall. Most growers seem to be doing an excellent job with brown rot control. A small amount of **Rhizopus rot** is present on some fruit that is close to harvest, and in some instances has made it through the packing line. Botran (Gowan) @ 1.3 lb/100 gal (2 - 2.5 lb/A) is still labeled, but only for pre harvest use 18 or 10 days before harvest. Allisan (Decco) is the same formulation, but has a post harvest label for the packing line (.33 - .5 lb/100gal.).

◆ **Blueberry**

**Sharpnosed leafhopper:** Trap catches are at low levels. No treatments are needed at this time.

**Blueberry Maggot:** Trap captures average less than 1

SEE BLUEBERRY ON PAGE 7

Insect Degree Day Accumulations as of 8/4							
Insect	Site & County						
	Biofix Date plus Degree Days Since Biofix						
	Bridgeton Cumb.	Hammonton. Cam.	Hardingville Glou.	Richwood Glou.	Princeton Mercer	Oldwick Hunt.	Morristown Morris
TABM <sub>45</sub> 2nd Gen	5/4 - 2232 Hit 2228 Aug 4 (1st spray) Predict 2415 about Aug 10 (2nd spray)	5/3 - 2229 Hit 2228 Aug 4 (1st spray) Predict 2415 about Aug 10 (2nd spray)	5/2 - 2250 Hit 2228 Aug 4 (1st spray) Predict 2415 about Aug 10 (2nd spray)	5/2 - 2252 Hit 2228 Aug 4 (1st spray) Predict 2415 about Aug 10 (2nd spray)	5/13 - 2068 Predict 2228 about Aug 9 (1st spray)	5/20 - 1926 Predict 2228 about Aug 15 (1st spray)	5/23 - 1796 Predict 2228 about Aug 15 (1st spray)
CM <sub>50</sub> 2nd Gen	5/8 - 1747 hit 1250 on 7/15	5/8 - 1735 hit 1250 on 7/15	5/8 - 1742 hit 1250 on 7/15	5/8 - 1743 hit 1250 on 7/15	5/11 - 1684 hit 1250 on 7/17	5/20 - 1542 hit 1250 on 7/22	5/20 - 1504 hit 1250 on 7/24
All reported accumulations based on Skybit Inc. data with some ground verification. OFM base = 45, max = 90, TABM base = 45, max = 91, CM base = 50, max = 88.							
Spray targets based on: OFM: 200 °D after biofix and again 200 °D later (first generation only) TABM: (A.M. sprays) 490, 625, 763, 898 - 1st gen. and 2228, 2415, 2605, 2795 °D after biofix - 2nd gen. CM: 250 °D after biofix and again 2 - 3 weeks later; 2nd generation at 1250 - 1300 °D after biofix + another spray 14 to 21 days later.							

fly per trap on most farms. Several sites in Burlington County have shown individual catches in excess of 1 fly per trap. One site showed 5 flies per trap on the yellow sticky boards used for sharpnosed leafhopper monitoring. A small number of sites have shown positive readings for maggot larvae in fruit, mostly in Burlington County. *Growers with late varieties, especially in Burlington County should maintain protection for maggot control.*

**Anthracnose:** Recent berry samples have shown an increase in anthracnose levels. Last week's incubated berries indicated that 35% of our samples had low to moderate levels of disease (in excess of 1-2%).

**Insect Trap Captures**

Week Ending	5/24	5/31	6/7	6/14	6/21	6/28	7/5	7/12	7/19	7/26	8/2
<b>Tree Fruit - Southern Counties</b>											
RBLR	1.8	0.5	0.5	0.5	26.8	54.8	36.7	20.3	9.7	5.3	10.9
STLM	276	76.6	283.1	1005	1876	1734	1071	854	1039	1476	1341
TABM-A	21.5	29.0	76.3	75.7	59.4	37.4	10.7	4.8	6.7	19.1	21.0
CM	7.5	6.3	1.4	1.6	4.3	1.4	0.2	0.3	1.2	3.2	2.0
AM	—	—	—	—	1.0	0.0	0.1	0.0	0.13	0.0	0.1
OFM	11.9	10.7	2.7	4.5	8.4	8.0	3.7	2.9	5.9	5.6	3.1
TABM-P48.7	70.1	78.9	68.5	46.3	30.0	8.6	9.7	7.7	20.0	30.6	
LPTB	96.3	67.1	44.7	72.9	102.2	55.1	36.8	30.7	22.5	12.4	17.4
PTB	2.0	0.02	0.2	2.3	3.5	7.0	3.2	3.5	3.4	5.8	3.9
<b>Tree Fruit - Northern Counties</b>											
RBLR	17.5	4.0	3.1	0.0	9.8	25.5	19.2	8.4	0.4	17.6	
STLM	119	43.9	13.1	352.5	1085	932	794	627	557	620	
TABM-A	3.3	10.5	12.6	26.5	32.2	25.5	10.0	3.2	1.1	1.1	
CM	6.1	8.4	8.0	7.2	11.5	7.5	5.1	2.4	6.1	7.6	
AM	—	—	—	—	—	.04	.02	0.7	0.4	0.0	
OFM	7.8	4.8	6.4	3.9	9.5	6.3	4.9	4.3	3.2	3.6	
TABM-P0.4	15.2	2.2	18.2	52.0	3.7	20.0	10.0	0.0	0.0		
LPTB	12.4	13.3	28.4	105.8	74.8	30.4	9.5	9.8	7.0	18.7	
PTB	1.9	3.2	7.0	17.0	13.2	16.3	8.0	6.2	4.1	9.3	
<b>Blueberry - Atlantic County</b>											
RBLR	8.6	0	0.2	27.3	178	141	6.5	45.4	16.9	8.4	6.4
OBLR	0.4	1.6	13.3	22.8	31.0	15.0	2.3	0.8	0.7	3.0	3.5
CBFW	0.5	1.5	2.4	0.7	1.2	0.02	0.08	0.1	0.0	0.0	0.0
SNLH	—	—	0.9	3.8	2.3	2.1	1.2	0.8	0.2	0.3	0.4
BBM	—	—	—	—	0.2	0.16	0.2	0.3	0.1	0.1	0.2
OB					403	831	774	1451	1173	450	182
<b>Burlington County</b>											
RBLR	0.7	0.3	0.0	0.1	41.5	96	73.4	45.0	9.9	3.1	1.2
OBLR	0.1	0.6	10.3	34.1	46.5	21.4	7.0	1.0	0.3	0.9	0.6
CBFW	0.6	2.6	21.9	12.7	2.9	0.8	0.0	0.1	0.0	.08	0.0
SNLH	—	—	0.5	2.9	7.9	7.5	1.8	1.6	0.9	0.1	0.6
BBM	—	—	—	—	0.0	0.11	0.2	0.2	0.4	0.3	0.5
OB					—	509	449	840	663	356	112
<b>Abandoned Fields (both counties)</b>											
RBLR	0.8	0.0	0.0	3.0	38.3	70.0	47.0	34.0	10.0	8.0	0.5
OBLR	0.0	0.5	3.0	14.3	59.0	34.5	15.5	4.0	1.0	1.5	2.0
CBFW	0.0	0.3	1.5	1.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
SNLH	—	—	12	15.0	53.2	38.5	22.5	18.3	10.0	6.9	6.0
BBM	—	—	—	—	0.0	3.2	6.8	37.0	47.0	19.5	8.3
OB								435	191	122	51