RED SHOOT—WHAT IT IS, WHAT IT'S NOT

Red shoot is a disease of cranberry caused by a fungus in the genus Exobasidium. Affected shoots are spindly with red or yellow leaves that are slightly rounder than typical oval-shaped cranberry leaves. Diseased shoots occur singly or as a cluster arising from a node on a buried runner. Red shoot has been reported from all major cranberry-growing regions, but it generally has not been economically important and does not warrant fungicide use.

So why am I writing about it? Because some growers are making it an economic and environmental issue by thinking it's a weed that calls for herbicide treatment. Some of the confusion stems from the fact that you can easily pull the affected red shoots out of the ground, and they appear to have their own root system. In fact, however, the shoots are attached to the cranberry runner; you have to dig carefully in order to not rip them off. Very little research has been done on red shoot, but the fact that it is a disease was confirmed by taking fungal spores from infected plants and inoculating them onto healthy plants. The inoculated plants came down with red shoot symptoms.

Other Exobasidium diseases of cranberry include red leaf spot (common in over-fertilized Ben Lear) and rose bloom (leaves appear thick, fleshy, and pink; rose bloom is rare outside the Pacific Northwest). Some growers and consultants are reporting seeing more red shoot and red leaf spot over the past couple of years than in the past. In general Exobasidium diseases are favored by cool, moist conditions which were common weather patterns in 1996 and 1997.

Patty McManus, UW-Extension Plant Pathologist

WISCONSIN HOSTS RESEARCH AND EXTENSION CONFERENCE

Wisconsin is hosting the 1997 North American Cranberry Research and Extension Workers Conference in October. These biennial meetings attract University, government and private researchers and Extension specialists from throughout North America. About 65 people will be attending the meetings this year, a reflection of the support provided by the cranberry industry and governments throughout the United States and Canada. During the meetings researchers will share experimental results and coordinate ideas for further research to answer scientific questions about cranberry production.

The meetings will be held in Wisconsin Rapids. The mornings will be devoted to sharing research presentations and the afternoons will be marsh tours showing specific aspects of Wisconsin cranberry production and research projects. If you see a number of large state-owned vans driving through your area during harvest, wave at us. We're trying to learn more about the industry so we can provide better help.

Teryl Roper, UW-Madison, Extension Horticulturist

PESTICIDE RECORD KEEPING CHECKS

The Wisconsin Department of Agriculture, Trade and Consumer Protection has begun some spot checking of grower pesticide application records. At this time the department is just checking for compliance to assure that growers are keeping the necessary records relating to pesticide application. Pesticide application forms required by handlers will usually suffice. However, you must be sure your records contain the EPA registration number from the product for restricted use materials and you must record the total pounds of active ingredient applied per application.

Keeping pesticide application records are required under the Worker Protection Standards rules. Keeping good pesticide application records should be useful to you and will protect you against untrue claims.

Teryl Roper, UW-Madison Extension Horticulturist

ENVIRONMENTAL ESTROGEN STUDY RECALLED

In June 1996, a Tulane University researcher published a study claiming combinations of pesticides are as much as 1,600 times more potent as environmental estrogens than the individual estrogens tested alone. The media published the news with much fanfare and Science Magazine not only published the study, but also ran a news item and an editorial.

Unfortunately, the study was published just in time to "support" inclusion of a provision in the Food Quality Protection Act of 1996 mandating that the EPA develop a screening program for pesticides that may have so-called "estrogenic properties".

Since the study was published, U.S. and U.K. researchers have tried, but failed, to reproduce the Tulane results. Earlier this year, the Tulane researchers were raked over the coals at the annual Society of Toxicology meeting because no one could reproduce their results.

In a letter addressed to Science Magazine, the Tulane researchers formally withdrew their report. The wrote that they and other researchers had not been able to reproduce the results of the first study and that, "it is clear that any conclusions drawn from this paper must be suspended until such time, if ever, the data can be substantiated. . . .it seems evident that there must have been a fundamental flaw in the design of our original experiment. As a consequence of our efforts and those of others, and considering the impact our report has had in so many quarters, we have decided to formally withdraw the paper and its finding.

(Taken from the September 1997 WFCA newsletter.)

REQUESTS FOR INFORMATION

In the last couple of issues of the Wisconsin Cranberry Crop Management newsletter we have asked you for information about Orbit use and about weed pressure. Both of these data requests are related to the need for information to justify Section 18 registrations for pesticides. In the case of Orbit to justify an additional year of use and for Stinger to justify obtaining an initial special local needs registration.

Unfortunately, we don't have a special crystal ball we can look into to obtain the data we need to service the industry. There is only one source of this information, and that is from you. We recognize that everyone is sending their customers (and potential customers) survey instruments trying to obtain data to justify their existence. This request is slightly different. Having the data we have requested will allow us to provide you with product registrations that many of you have told us you need.

Please return the weed survey that was in the last newsletter. Please report your use of the fungicide Orbit to Patty McManus.

MICHIGAN CRANBERRIES

Recently Tod Planer and I travelled to Michigan to get a look at their emerging industry. Cranberries were formerly grown in Michigan's lower peninsula. Most of these plantings were abandoned by shortly after the turn of the century. One small planting has been maintained near whitefish point in the upper peninsula for many years.

The largest planting in Michigan is going into Cheboygan county which is just east of Mackinaw City and near Lake Huron. This planting is going into mined peat fields and is reportedly quite extensive. The plantings we visited were in southwest Michigan in Ottawa, Allegan and Van Buren counties.

Blueberry growers in southwest Michigan have shown great interest in converting some of their blueberry plantings or new sites to cranberries. Most good blueberry sites would also grow cranberries. Blueberries also require well drained acidic soils that remain moist, but not waterlogged. Most blueberries in Michigan are grown in sandy soils.

The oldest plantings we visited were about 4-5 years old. The newest were planted this year (1997). Popular cultivars include Stevens, Ben Lear, Pilgrim and Bergman. Some of the plantings have been established with cuttings, others have been planted with plugs. The plugs were planted by hand and took a long time to plant. The growth is only marginally greater than for cuttings. Currently the plantings are scattered. It does not appear there will be a central core area with many acres of cranberries in Michigan.

Growers are still fighting weed infestations that are common for new beds. They are wiping with roundup to control the taller weeds. Some of the older beds were treated with Evital. This herbicide controlled many weeds, but also caused some leaves to bleach as it typical for Evital.

Insect and disease pests of cranberry and blueberry are fairly similar. Considering that vines have been shipped to Michigan from other states it is almost assured that common pests from other states will soon be found in Michgan.

Michigan growers are very aware that they will need to develop water resources to have enough water to grow cranberries. They can pump out of streams, rivers and lakes as long as they don't stop the flow completely. They can also divert water from country drains. There is a prohibition against having ponds or reservoirs in excess of 50 acres without obtaining a permit. Water may well be the limiting factor for cranberry production in Michigan.

Somewhere around 15 acres will be harvested in 1997. About 5 acres were harvested last year. So far the fruit has been packaged and sold in local fresh market outlets. Blueberry growers have learned that their existing sorting equipment can be adapted to sort and package cranberries as well.

Winter protection is a problem in southwest Michigan. Most of the plantings are close to Lake Michigan and will benefit from the moderating influence of the lake. There is also abundant lake effect snow most winters, however, this is not completely reliable. Vines can be flooded, but it is not uncommon to have a mid-winter thaw that would melt the ice and leave the vines unprotected.

It is too early to predict the rise or fall of a Michigan cranberry industry. It is clear that cranberries will grow in Michigan. Much infrastructure already exists in terms of freezers, receiving stations, juice facilities, etc. The issues relating to producing the crop will likely be overcome as growers become more experienced with cranberries. It will be interesting to follow this industry over time.

Teryl Roper, UW-Madison Extension Horticulturist

WISCONSIN CRANBERRY SCHOOL

The annual Wisconsin Cranberry School will be held January 20-22, 1997 at the Stevens Point Holiday Inn. This is the primary winter meeting for Wisconsin cranberry growers where they are made aware of the latest research and trends related to cranberry culture. The topic for 1998 is mineral nutrition.

Last year was the first year that Cranberry School was combined with the annual meeting of the WSCGA and with handler meetings. While this made a long week, it reduced the number of trips that growers had to make to keep current. The Wisconsin Cranberry School is sponsored jointly by the University of Wisconsin-Extension and the Wisconsin State Cranberry Growers Association. Please put these dates on your calendar.

CRANBERRIES ON THE INTERNET

The Wisconsin State Cranberry Growers Association has a world wide web page. The address is: www.wiscran.org
The site is still under construction, but there are some pretty pictures and within the next few weeks there will be more information added. We hope to have these newsletters available on the web by next summer with some sort of archive so you can see past issues as well as the current ones.

For those of you with e-mail there is a cranberry e-mail list that contains both growers and researchers/Extension specialists. To subscribe to the list send a message to me requesting to be added to the list.

trroper@facstaff.wisc.edu

This is an easy means of communicating with other growers and researchers.

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