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Reports Now Available: Reactions of Sweet Corn Hybrids to Prevalent Diseases  
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Results of the annual disease nurseries have been reported each year in the Midwestern Vegetable Variety Trial Report. Results of recent nurseries also are available on the web at [www.sweetcorn.uiuc.edu](http://www.sweetcorn.uiuc.edu). This article summarizes the disease reactions of 707 commercially-available hybrids that have been evaluated in UIUC nurseries since 1984. The summary includes reactions of 153 sugary hybrids (144 yellow, 3 bi-color and 6 white), 186 sugary enhancer hybrids (65 yellow, 82 bi-color, 37 white, and 2 red), 361 shrunken-2 hybrids (196 yellow, 104 bi-color, 60 white and 1 multi-color), and 7 brittle hybrids (6 yellow and 1 white).

Common rust, northern leaf blight, Stewart's bacterial, maize dwarf mosaic - MDM, southern leaf blight, anthracnose leaf blight, southern rust and gray leaf spot are endemic diseases of sweet corn grown in North America. Reactions to these diseases vary among commercial sweet corn hybrids. Since 1984, nearly 2,500 hybrids have been evaluated for disease reactions in nurseries at the University of Illinois at Urbana-Champaign. In each trial, hybrids were classified as resistant (R), moderately resistant (MR), moderate (M), moderately susceptible (MS), and susceptible (S).

Nevertheless, a consistent response of a hybrid over several trials gives a reasonable estimate of the disease reaction of that hybrid relative to all other sweet corn hybrids. These reactions can be used to plan disease management strategies by assessing the potential for diseases to become severe and affect yield of a specific hybrid.

Disease reactions are averaged over all trials in which a hybrid was evaluated and are presented on a 0 to 9 scale, where: 0 = no disease, 1 = resistant, 3 = moderately resistant, 5 = moderate, 7 = moderately susceptible, and 9 = susceptible. Reactions listed as 2, 4, 6, 8, are between these categories (e.g., 2 indicates a reaction between resistant and moderately resistant, i.e., R-MR). Hybrids with Rp-reactions to rust are designated Rp and reactions to avirulent (av), D-virulent (D-v) and/or G-virulent (G-v) populations of *P. sorghi* are listed.

Editors Note: I have copies of these reports as Word files and Excel files that contain the text and accompanying tables for the 2003 University of Illinois sweet corn hybrid disease nursery and the summary report for all hybrids rated since 1984. I can mail printed copies or email them as attachments to anyone who is interested in receiving the reports. The reports are too large to be faxed. Contact: Bob Precheur, 2001 Fyffe Ct., Columbus, OH 43210; Phone:614-292-3857. email: [precheur.1@osu.edu](mailto:precheur.1@osu.edu)

As mentioned above, the reports are available from the Univ. of IL website: at: [www.sweetcorn.uiuc.edu](http://www.sweetcorn.uiuc.edu) or you can get the reports in the 2003 Midwestern Vegetable Variety Report which should be available in December or early January.

### The Value of a Food Safety Plan

by Shari L. Plimpton, Ph.D., Food Safety Educator, Ohio Specialty Crop Food Safety Initiative

Talking about "value" is not something to be done lightly with growers. Value is the name of the game. Without value you could "lose the farm," literally. Yet, you still hear people bandying around the word "value" for every little thing, as well as the big ones. "Current cash value," "intrinsic value," and "value-added" are a few of the ways "value" enters our lives, clouds our eyes, and fogs our brains before we read another word.

So, I will keep it simple. I am talking about how important it is for you to reduce your risks. Reducing your risks is the value of a Food Safety Plan. Food Safety Plans are a systematic way to assess the food safety risks in your operation, and document your effort to reduce them.

How does it minimize your risks? Reducing food safety risk for consumers speaks for itself. Growers grow not only for the opportunity to make a livelihood, but they also grow for the value (there's that word again) they add to people's lives. Making people sick is not acceptable to any grower. Reducing your risk of doing so is, as they say, invaluable.

Another form of risk reduction can occur in the unfortunate event of a fresh produce associated, food borne outbreak. When the FDA is informed of an outbreak, its agents study the cases, conduct laboratory tests, and then conduct an "environmental investigation." The nature of this third step in their investigation process is to first determine if the contamination was most likely to have occurred at the point of food preparation, and then to determine where it may have occurred if not there. Having a food safety plan in place helps to establish the credibility of the grower as a safe operation and ultimately to reduce the risk that an investigation ever focuses on the farm.

Finally, another important area of risk reduction is lost business. The number of distributors and retailers requiring growers to have food safety plans is increasing. Many are accompanying this requirement with the specification that the grower undergo annual third party audits to establish that the Food Safety Plan is in place and being implemented. In this environment having a practical food safety plan can be a selling point for your business, and reduce the likelihood that you are passed over for growers who have made the effort to reduce their risks.

One service being provided to growers through the Ohio Specialty Crop Food Safety Initiative is assistance in developing a Food Safety Plan. The initiative is financed in part or totally through a grant from the Ohio Department of Agriculture, the State of Ohio and the United States Department of Agriculture under the provisions of the Specialty Crop Grant. For more information on the Ohio Specialty Crop Food Safety

Initiative, contact John Wargowsky, (614) 246-8286 or [jwargows@ofbf.org](mailto:jwargows@ofbf.org), or Mary Donnell, (419) 354-6916 or [donnell.8@osu.edu](mailto:donnell.8@osu.edu) or visit [www.midamservices.org](http://www.midamservices.org) and click on "projects."

#### EPA COMPLETES SCIENTIFIC REVIEW OF ATRAZINE

From Pep-Talk, Nov, 2003

EPA has released additional materials to support the Interim Re-registration Eligibility Decision (IRED) that was released in January. The materials give EPAs assessment of studies on the affects of atrazine.

EPA has carefully evaluated and received scientific peer review of studies regarding possible developmental effects on amphibians exposed to low doses of atrazine. These data do not provide evidence to show that atrazine produces a consistent, reproducible effect on amphibian development. An independent science peer review panel convened in June supported the Agencys conclusions and recommended that more data be generated to evaluate this potential relationship. Generation of this data is underway. Based on the available scientific work on the potential association between atrazine and cancer, the Agency does not find any studies that would lead the Agency to conclude that potential cancer risk is likely from exposure to atrazine. However, EPA will continue to review new studies on this issue and plans to convene and another independent Scientific Advisory Panel concerning atrazine and its potential association with carcinogenic effects.

As part of the agreement with EPA, the manufacturers of atrazine are required to monitor residue levels of atrazine in 40 indicator watersheds. If monitoring in these watersheds shows atrazine above set levels, the company is responsible for remediating the watershed, using standards and techniques like the Total Maximum Daily Load (TMDL) program through the Clean Water Act. If the remediation is not sufficient, EPA may withdraw atrazine use from the watersheds considered in jeopardy. (Source: EPA Pesticide Program Update, 11/03/03)

In an unrelated story, the European Union will not reregister atrazine and simazine, according to Syngenta. The company says the decision was made despite a favorable science review demonstrating the products safety to humans and the environment. (Source: Pesticide & Toxic Chemical News, Vol. 31, No. 50)

#### FARMERS AFFECTED BY USDOT REGULATIONS

From Pep-Talk, Nov, 2003

The U.S. Department of Transportation (USDOT) has released a security requirement for farmers transporting hazardous materials. The hazardous materials are fertilizer, pesticides, gasoline, diesel fuel or propane. The security requirements will apply if a farmer is transporting hazardous materials in a package or container larger than 119 gallons or a single load heavier than 1,000 pounds.

Farmers who meet these criteria must develop a security plan. Currently, there is no official form, but farmers can access an example template developed by USDOT and the American Farm Bureau Federation. Its posted by Rutgers University at <http://www.rce.rutgers.edu/farmsafety/security/HM232.pdf>  
Although the regulation went into effect on November 1, staff at USDOT indicate they are more interested in outreach and education than enforcement at this time. Stay tuned for more information as it becomes available.

#### What's New At The VegNet Web Site

##### Problem Of The Week

A pictorial comparison of Squash Vine borer damage and Bacterial Wilt in pumpkins. While the symptoms are similar, there are some key differences. Check it out. Click on the 'Problem of the Week' button of the left side.

##### VegNet Vegetable Schools

A series of slide presentations are now available in order to update you on the latest pumpkin and sweet corn research. We begin with 6 pumpkin topics in Pumpkins 101 and have 10 slide presentations available in Sweet Corn 101. In sweet corn. Powerpoint presentations and html online slide shows are available now. Go to the VegNet homepage.

##### Pumpkins 101

The use of trap crops and Admire for cucumber beetle control and New varieties for 2001. We have presentations on cover crops for disease control and pumpkin fungicide use.

Perimeter Trap Cropping. Online html slide show | Perimeter Trap Cropping. PPT, 7 Mbytes

See also the Research Results section on the home page for text version of the report.

##### Sweet Corn 101

Presently only Powerpoint presentations available. Coming Soon: Online HTML slide shows. Check back often Nine topics including:

Aspects of Variety Selection based on Disease Control [ ppt 40 KB]

Internet Link To "Reactions of Sweet Corn Hybrids to Prevalent Diseases" Dr. Jerald Pataky [www.sweetcorn.uiuc.edu](http://www.sweetcorn.uiuc.edu)

Producing Early Sweet Corn [ ppt 3.5 Mbytes ]

Managing Weeds in Sweet Corn [ ppt, 9 Mbytes ]

Sweet Corn Herbicides & Variety Sensitivity. [ ppt 2Mbytes ]

Sweet Corn Development and Critical Periods for Irrigation Management [ppt 1.6 Mbytes ]

Flea Beetle Management in Sweet Corn [ ppt 510 KB ]

How To Keep Worms Out of Sweet Corn Ears [ ppt 8.3 Mbytes ]

Role of Bt Transgenic Hybrids in Sweet Corn Pest Management. [ ppt 21.2 Mbytes ]

Bt Sweet Corn Efficacy in OH, 1999-2000 [ppt, 208 KB ]

[Return to Vegetable Crops Homepage | Ohio State University Extension](#)

We appreciate very much the financial support for this series of vegetable reports which we have received from the board of growers responsible for the Ohio Vegetable and Small Fruit research and Development Program. This is an example of use of Funds from the "Assessment Program".

Where trade names are used, no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Keith L. Smith, Director, Ohio State University Extension.

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