Many of you have probably heard by now that Pristine®, a new fungicide from BASF, is very effective against gummy stem blight of cucurbits. Unfortunately you have probably also heard that the product will not be abundantly available this year. I have heard from BASF that only 22,000 lbs of Pristine will be available for the southeastern U.S. this summer. This means about 30,000 acres may be sprayed once at the 12.5 oz rate. Therefore, if you have growers that do manage to acquire some Pristine, they should use it at the most effective time possible. I have recommended that Pristine be applied once to watermelons at fruit set or at least 21 days prior to harvest. This allows you to use the material at a critical time when chlorothalonil may burn melons and when most watermelons seem to severely affected by gummy stem blight. I recommend the 12.5 oz rate for gummy stem blight but you may need to go higher if control of downy mildew is needed.

Tanostm 50DF is a new fungicide premix from DuPont that contains 25% famoxadone and 25% cymoxanil. This new fungicide is labeled on cucurbits, head lettuce, peppers, potatoes and tomatoes. The diseases that are controlled are primarily anthracnose, downy mildews, late and early blight, foliar Phytophthora capsici of pepper, and Septoria leaf spot. Diseases suppressed include buckeye rot, bacterial spot and bacterial speck of tomato. Please read the label closely for resistance management information because this material is recommended to be tank-mixed with chlorothalonil or EBDC fungicides like maneb or mancozeb. Also, the mode of action of famoxadone is very similar to that of the strobilurin fungicides so rotating Tanos with Quadris, Flint or Cabrio will increase selection pressure for fungicide resistance development. For Georgia growers I consider this material to be a good rotational material for downy mildew on cucurbits and a good material for use on pepper since it will control both anthracnose and P. capsici.

Attached is the Tanos label.
Time is Running Out on MBr

William Terry Kelley
Extension Horticulturist - UGA

As it stands right now, time is running out on methyl bromide use in the United States. Without further action, methyl bromide will no longer be imported or produced in the U.S. as of December 31, 2004. That means there is less than 11 months left for something to change.

It is time growers started to look at potential alternatives in a serious manner. Certainly as long as methyl bromide is available, it is still the best system that we have for producing vegetables on plastic mulch. However, whether there is an extension of use for the short-term or not, it is becoming increasingly apparent that the days of methyl bromide use in the U.S. are numbered. The stockpiles that will be available after production ceases will not last long.

Currently the situation still looks optimistic that we will get some level of critical use exemption. The Technical and Economic Assessment Panel will meet in Portugal in mid-March to try to hash out the differences between the United States and other countries over the current critical use nominations. The European Union and Article 5 Nations (countries that can use methyl bromide through 2015) oppose the U.S. getting a 39% level of production approved and also take issue with some other terminology in the original TEAP recommendation.

After that meeting there will be an Extraordinary Meeting of the Parties of the Montreal Protocol in Montreal the last week of March. They will once again consider approval of critical use nominations. If no agreement can be reached at that meeting, then critical use exemption may be in trouble.

University of Georgia Extension Vegetable Team members have been working closely with EPA to strengthen the applications from Florida and the Southeast Consortium. Georgia has also found some hope that the 30% allocation that EPA is nominating on peppers and eggplant for Georgia may be increased somewhat. That is still being debated, however.

Beyond these efforts, there is a bill in congress that would hold the U.S. production at 39% if no agreement can be reached through the Montreal Protocol channels. However, the bill currently does not have overwhelming support and would require the votes of congressmen not only in the Southeast and California, but also from Midwestern farm states in order to pass. Certainly passage of this bill would be a last resort by the U.S. to continue the use of methyl bromide and it is doubtful there would be enough votes to pass this bill.

Even if critical use exemption is granted, it is likely that part of the stipulation would be that all countries that receive exemptions would be required to operate on a declining level of methyl bromide over the next three to five years with the ultimate goal of eliminating it in the not-to-distant future. So, time is running out.

UGA scientists have been working diligently to come up with alternatives for Georgia vegetable producers. Currently, there is no alternative that is as good as methyl bromide. It is almost certain that any alternative system will include a combination of treatments. These combinations are likely to include such things as 1,3-dichloropropene (Telone), chloropicrin, metam sodium/potassium and a herbicide combination. If methyl iodide gets registered in the U.S., it could also be in the alternative mix.

The most important issue, however, is that none of these systems have been tried in large scale operations in Georgia. In the very near future, it will become imperative to trial these alternative systems in larger scale, on-farm plots. If producers wait until methyl bromide is gone to transition to alternatives, the chances of success in the short term will be diminished. If Georgia producers are going to be successful in producing vegetables in the future without methyl bromide, the transitional phase should begin now. Starting now will insure that the learning curve for these alternative systems will not have to be at the expense of the entire farm.

Page 2
The U.S. Ag Trade Balance . . More Than Just A Number

Esendugue Greg Fonsah
Extension Economist - UGA

This article is an extract from the February 2004 Amber Waves entitled "The U.S. Ag Trade Balance .... More Than Just A Number" by Alberto Jerardo. The article hits on the topic and consolidates our predictions and discussions in various Agents, Farmers and Professional training sessions conducted by the University of Georgia, for the fruits and vegetable industry. It is imperative and of vital importance for the Fruit and Vegetable Industry to keep abreast of these trends. I believe this would provide the information needed for future market forecast and decision making. Again this is just a small portion of the article for your information and guidance.

U.S. Multinational Companies Play a Role in Trade

About 15 percent of U.S. food imports are supplied by U.S. food companies through their farms, processing plants, and affiliates in foreign countries. For example, the U.S. imports bananas, pineapples, avocados, other tropical fruits, and canned or fresh vegetables produced overseas by Dole, Del Monte, and Chiquita. Foreign growers under contract to U.S. companies also supply agricultural products to the large U.S. market. U.S. food growers and manufacturers, or their affiliated companies, abroad will supply more fresh and processed foods to U.S. consumers, much like other U.S. multinational companies that take advantage of lower costs of land, labor, raw materials, or capital overseas. In Mexico, a number of U.S.-affiliated food growers and manufacturers already export fresh and processed fruits and vegetables to the United States, the result of contract agreements or economic advantages available locally.

Many large U.S. multinational companies prefer to supply foreign markets through sales from their foreign operations or affiliates. The proximity to markets, lower production costs, and avoidance of tariffs and trade barriers provide companies incentives to manufacture products abroad rather than export products from the United States. While the U.S. is a net importer of processed foods from Canada, U.S. companies dominate food manufacturing in Canada, as well as in Mexico. Kraft Foods is the leading food manufacturer in Canada, and PepsiCo is the largest in Mexico. The United States imports more soft drinks than it exports, even though Coca-Cola and PepsiCo are the world’s biggest soft drink manufacturers. Circumstances such as these limit the growth of U.S. exports without affecting U.S. imports, in part because U.S. food companies themselves export to the United States from foreign bases.

Trade Brings Americans the Foods They Want

Aside from its symbolic value, the U.S. agricultural trade balance is not by itself a measure of export competitiveness, or import dependence. The U.S. remains a highly competitive exporter of grains, oilseeds, red meats, poultry, and cotton. But the U.S. also imports large quantities of grain products, vegetable oils, beef, pork, and cattle. U.S. farmers and food manufacturers do not and cannot produce all or enough of the foods that Americans desire, especially tropical crops. Today, trade is simply a means of providing for needs and wants that are not satisfied domestically or are more cheaply produced elsewhere.

U.S. agricultural imports generally differ from U.S. agricultural exports and will continue to increase independently of exports. Imported perishables arrive when domestic supplies are down or are not available, and imports consist mostly of high-value products, while 36 percent of U.S. exports are bulk commodities. The declining U.S. trade surplus does not signal reduced competitiveness of the U.S. farm sector, but rather Americans’ preference for a wider variety of foods and beverages. It also reflects the intense competition among foreign food producers and manufacturers to supply the
large American market, including American companies and their affiliates.

U.S. population, income growth, and consumer tastes will ultimately push imports even higher in the long run. Fueled by immigration, the population is forecast to increase by 20 million people to 313 million by 2010. As the size and diversity of the population continue to grow, both the quantity and the variety of food imports will also grow. Disposable incomes of Americans, which are projected to grow by 1 percent in real terms annually, will drive up per capita food spending on higher quality and higher value products. Thus, U.S. agricultural imports in coming years are expected to increase both in quantity and value, as well as in share of total food consumed. U.S. exports over time, on the other hand, depend on economic and demographic growth in the rest of the world. Both imports and exports are dependent on the dollar=s exchange value, but with different effects. The higher the purchasing power of the dollar, the faster imports will grow relative to exports, enabling Americans to buy more of the foods they want.

A decade ago, a scenario in which the value of U.S. agricultural imports would someday exceed that of U.S. exports seemed farfetched. Indeed, the United States has been a net exporter of agricultural products since 1959, an uninterrupted span of 44 years. Today, the improbable has become probable. Since 1996, the agricultural trade surplus has shrunk from $27.3 billion (an all-time high) to $10.5 billion. Although U.S. agricultural exports continue to rise, imports are increasing nearly twice as fast.

The rapid growth of U.S. agricultural imports relative to exports in recent years may come as a surprise to many because the U.S. is still the world=s leading exporter of farm products. In fact, U.S. agricultural exports grew by almost $3 billion in 2003. And, higher commodity prices point to export gains in 2004. But the U.S. is also the world=s largest agricultural importer. Over the last 7 years, U.S. agricultural imports have increased by more than $13 billion, from $32 billion in 1996 to $46 billion in 2003. Agricultural economists Philip Paarlberg and Phil Abbott, both at Purdue University, predict that, if these trends continue, the current agricultural trade surplus will turn into a deficit toward the end of the decade. This forecast is consistent with ERS analysis of U.S. import and export trends.

This projected reversal of the trade balance raises questions not only about why a trade deficit may be imminent, but also about whether a trade deficit signals waning competitiveness. The trade balance, however, is primarily an accounting measure that, by itself, does not provide information about the scale or composition of a country=s international exchange of goods, nor the benefits derived from those goods. A closer examination of the composition of U.S. agricultural trade, economic growth, demographic shifts, changes in consumer preferences, and other factors indicates that there's more to the looming trade deficit than a simple negative sign.

For the complete article, please go http://www.ers.usda.gov/Amberwaves/February 04/Features/USTradeBalance.htm.

---

Vegetable Research and Extension Priority Workshop

Stormy Sparks
Extension Entomologist - UGA

A workshop was conducted during the Southeast Regional Fruit and Vegetable Conference to attempt to identify and prioritize research and extension needs in vegetable production. Issues identified and prioritized in this workshop were limited to crop production issues which could be addressed by research and extension scientists (marketing, labor, etc. were not addressed). The initial intent was to have this done primarily by producers, consultants, and industry representatives; however, participation from these groups was poor. We ended up with a group of about 20 people who participated in priority identification, including three producers, three IR-
4 representatives, and the majority from research or extension programs with universities (primarily the University of Georgia).

For the purpose of listing priorities, five categories were identified: plant pathology, weed science, horticulture, entomology and general. The ‘general’ category was used for broad issues which did not fit the previous categories or issues which encompassed multiple categories.

During the first section of the workshop, participants were asked simply to identify issues faced in production of vegetables. After finalization of the issues lists, a prioritization process was implemented which prioritized first within categories and then across categories. Results are attached in tabular form. The final prioritization table shows the top two issues from each category and the number of votes received in the first voting and the final prioritization vote.

The highest ranked issue at the workshop was viral diseases. While this issue was listed under plant pathology, it actually should be listed under general, as it encompasses all of the listed categories or disciplines. All of the viral diseases which were discussed are vectored by insects, have multiple weed hosts, and in the long range are probably best addressed through resistant variety development. Resistant variety development, while important to viral disease management, was also identified as a high priority for general disease management and was ranked second overall. Herbicide registrations was ranked third overall. Discussion of this issue focused on the lack of herbicide selection in vegetable production.

<table>
<thead>
<tr>
<th>Final prioritization</th>
<th>1st vote</th>
<th>Final vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viruses (TSWV, IYSV, Mosaic, etc.)</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Variety development (resistance to disease)</td>
<td>26</td>
<td>9</td>
</tr>
<tr>
<td>Herbicide registrations</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Methyl bromide alternatives</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Gummy stem blight in melons</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>New product evaluation</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Nutsedge control</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Insecticide resistance management</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Thrips control</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Variety development for Georgia environment</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>

Please see attached questionnaire and return to me.

**New Acaricide for Vegetables**

Stormy Sparks  
Extension Entomologist - UGA

Just in case you have not already heard, we have a new acaricide (miticide) for use in vegetables. Twospotted spider mites have become a more persistent problem in the last few years, and we have had numerous complaints of ‘less than normal’ control with many of our traditional acaricides. Acramite 50WS (produced and sold by Crompton, Uniroyal Chemical) recently received registration for use on okra, fruiting vegetables and cucurbit vegetables. This product should provide help with twospotted mite control.

Use rates for vegetables are from 0.75 to 1.0 pounds per acre. While these rates are not cheap ($60+/ac), a single application has generally shown
30 plus days of control in strawberries and orchard crops (where it has been registered and used previously). Use is limited to a single application in vegetables, as the potential for resistance is fairly high. Acramite has activity against eggs and motile stages (larvae, nymphs and adults), and with this range of activity can be used in somewhat of a rescue situation (versus a strict growth regulator or ovicide which would have to be used in a more preventative approach).

While Acramite has shown excellent activity against twospotted mites and similar species, indications are that it will not help us much with broad mites.

---

**Dual Magnum Indemnification Label for Georgia Bell Pepper Growers**

Stanley Culpepper  
Extension Weed Scientist - UGA

The Georgia Fruit and Vegetable Growers Association (GFVGA), in cooperation with Syngenta, developed our first indemnification label for the use of Dual Magnum in bell pepper. The label is now available from the GFVGA and must be present at time of application.

A $50 processing fee plus a $2 fee per acre use of Dual Magnum on pepper will be charged to cover the administrative costs of the program to GFVGA. It is crucial that growers support this effort, as this may be the most successful path of obtaining new herbicide labels in the future.

After obtaining the label, Dual Magnum can be applied in transplanted bell pepper after forming a PRE-FORMED bed and just prior to laying plastic. Care must be taken to not incorporate the Dual Magnum with the plastic laying process as injury (stunting) will likely be observed. Also, make sure the bell pepper transplant root ball is placed below the herbicide treated zone. Dual Magnum also allows a directed application to tomato transplants as long as there has been a rainfall between transplanting and application. Growers can apply Dual Magnum as a directed spray (suggest 20 gallon per acre) to the base of the tomato transplants. Dual Magnum will not provide postemergence weed control but would potentially provide residual weed control of sensitive weed species in plant holes. This method

---

**Dual Magnum Labeled for Tomatoes**

Stanley Culpepper  
Extension Weed Scientist - UGA

Syngenta recently labeled Dual Magnum for use in transplant tomato production. Dual Magnum can be applied in transplanted tomato after forming a PRE-FORMED bed and just prior to laying plastic. Care must be taken to not incorporate the Dual Magnum with the plastic laying process as injury (stunting) will likely be observed. Also, make sure the tomato transplant root ball is placed below the herbicide treated zone. The label currently suggest 1.0 to 1.33 pt/A; however, we would suggest growers initially use 0.75 to 1 pt/A until they become comfortable with the application process and its use in transplant tomato. Obviously, control at 0.75 to 1.0 pt/A will be less than that noted at 1.0 to 1.33 pt/A but crop tolerance is more of an issue than weed control as we now have several postemergence herbicide options to clean up weed (especially nutsedge and grasses) escapes.

The Dual Magnum label also allows a directed application to tomato transplants as long as their has been a rainfall between transplanting and application. Growers can apply Dual Magnum as a directed spray (suggest 20 gallon per acre) to the base of the tomato transplants. Dual Magnum will not provide postemergence weed control but would potentially provide residual weed control of sensitive weed species in plant holes. This method
of application has not been tested in Georgia but work in other states suggest tolerance is acceptable. Growers may want to try on limited acreage to see if this method of application fits their programs.

Dual Magnum may be applied to tomato row middles, as well.

**Envoke Labeled for Tomatoes**

Stanley Culpepper  
Extension Weed Scientist - UGA

Last week, Georgia obtained a Section 24 C label for a postemergence-directed application of Envoke to transplanted tomato in plastic. Growers must take special care when applying Envoke. This may be the first product that growers must apply as a directed spray adjusting the spray to not contact the tomato transplant. Additionally, growers must be sure the equipment is calibrated very closely as the product use rate is only 0.1 to 0.15 oz/A. Apply Envoke prior to fruit set and at least 45 days prior to harvest. Add ONLY a non-ionic surfactant to the application mixture.

Do not apply Envoke with ANY other pesticide, fertilizer or additive other than the non-ionic surfactant.

Envoke, if applied properly, should provide good to excellent control of cocklebur, beggarweed, pitted morningglory, entireleaf morningglory, and redweed. Fair to good control of nutsedge should also be observed.

Contact your local Extension office for more details.