WEEKLY CROP UPDATE
UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 14, Issue 2 **April 7, 2006**

Soybean Rust Update

Soybean rust has not been very active in the south as of this writing. There is some present on kudzu in several southern states including Florida, Alabama, and Southwest Georgia. A recent report from Georgia reported that 24 roadside kudzu patches in southern and southwest Georgia were examined April 5 for winter dieback and soybean rust. No rust was found, and all kudzu sites are continuing to break dormancy (~10-20% area of each site is greening). For the sites scouted April 5, only new growth was observed, and no old growth or rust was observed.

Syngenta Crop Protection announced recently that the United States Environmental Protection Agency (EPA) issued a FIFRA Section 18 quarantine exemption registration for the use of Alto® fungicide, which contains the active ingredient cyproconazole, in soybeans to control Asian Soybean Rust (ASR) (*Phakopsora pachyrhizi*). The Section 18 exemption for Alto allows growers to apply the fungicide to control soybean rust in Minnesota and South Dakota, the first of 19 states to receive approval after requesting a Section 18 quarantine exemption from EPA. This is the first new section 18 registration for the second group of fungicides for soybean rust. When EPA issues the section 18 for Delaware, which should be next month, more information on rates and uses will be available at that time.

Bob Mulrooney

Vegetables

Vegetable Crop Insects - *Joanne Whalen, Extension IPM Specialist*; jwhalen@udel.edu

Sweet Corn

If you are planting varieties that are susceptible to Stewart's Wilt, flea beetle control is extremely important. At-planting, systemic insecticides or commercially applied, systemic seed treatments should provide early season protection from flea beetle damage. Commercially applied, systemic seed treatments available on sweet corn include Gaucho, Poncho and Cruiser. **Be sure to check the labels for rotational restrictions since they vary with each material**. The only at-planting, systemic, soil insecticides labeled on sweet corn that provide protection from flea beetle damage are Counter and Furadan. You can also control flea beetles with foliar insecticides. When possible, fields should be scouted mid-day when beetles are active. Fields should be scouted starting at the spike stage and treatments applied once you find 5% of the plants infested with beetles.

Mature Watermelon Vine Decline – *Bob Mulrooney; Extension Plant Pathologist*; bobmul@udel.edu

The following report from South Carolina was written by Dr. Tony Keineth from Clemson University in South Carolina. This is a new disease of watermelon that has affected

watermelons in Florida only. Hopefully it will remain in the South, but we need to be aware of this threat here in Delaware and the Eastern Shore.

By this time, most watermelon growers have heard about Mature Watermelon Vine Decline (MWVD), a new disease that has caused $25 million losses to the Florida watermelon industry between 2003 and 2005. This disease is the top research priority for the National Watermelon Association.

Outbreaks started in southwest Florida in 2003 but spread to central and south-central Florida in 2004 and 2005. The disease has been named "Mature Watermelon Vine Decline" because symptoms appear just before or after first harvest. All varieties of watermelon are susceptible.

Because symptoms are variable, this disease cannot be diagnosed reliably based on visual symptoms. Vines may collapse and die in several days. The vascular tissue in the crown turns yellow or tan, but discoloration is not as dark as from Fusarium wilt.

In some cases, fruits also were affected, with dull or greasy looking flesh with circular patterns resembling overripe fruit. Narrow, dark spots may be found in the white part of the flesh just below the rind. Affected fruit are unusually firm and harder to slice than normal.

At this point, the most likely cause of MWVD is a virus called Squash Vein Yellowing Virus. This plant virus is spread by whiteflies. The virus affects squash and watermelon. It is not yet known if the virus can infect cantaloupe or other cucurbits. It is possible to infect plants with the virus by rubbing plant sap on the leaves (called mechanical transmission).

Scientists from Florida have investigated many factors in an attempt to learn what triggers an outbreak or if other pathogens are involved in MWVD. These studies are continuing in 2006.

Over the years, many different vine declines of watermelon and cantaloupe have been observed. A few plant scientists believe that poor root growth is the underlying cause or predisposing factor in most vine declines.

Not all vine declines are the same! A vine decline has been observed in Indiana since the late 1990s, but it is not caused by Squash Vein Yellowing Virus. The cause of that vine decline has not been determined, but it is probably a soil fungus, since it is controlled with methyl bromide, which does not control MWVD in Florida.

What does all of this mean for South Carolina (*Delaware*) watermelon growers?
Vine decline has not been confirmed outside of Florida. Therefore, I assume that it is not yet present in South Carolina (*or Delaware*). Growers must be very careful not to move whiteflies from south or central Florida into South Carolina on watermelon transplants, because such whiteflies could be carrying the Squash Vein Yellowing Virus.

Vine decline cannot be diagnosed based on symptoms. The pathologists in Florida have offered to test any suspect samples of MWVD from other states. Therefore, any suspect samples from South Carolina (*or Delaware*) will be sent to specialists in Florida.

For 2006, maintain normal watermelon production and pest management practices. **Contact your county Extension agent or Bob Mulrooney or Kate Everts if you suspect you see symptoms of MWVD in 2006.**

Agronomic Crops

Agronomic Crop Insects - *Joanne Whalen, Extension IPM Specialist*; jwhalen@udel.edu

Alfalfa
With the recent dry, cool weather, there have been a number of reports of heavy pea aphid populations in alfalfa. Heavily infested plants may turn yellow and wilt. Although generally not a problem, pea aphids prefer cool, dry conditions and can be a problem in both the first cutting and during spring seedling establishment. This species tends to congregate on the tips of

alfalfa plants where they feed on young, succulent developing shoots. To sample for aphids, clip alfalfa stems at the base of the plant and record the number present per plant. You may want to examine plants over a white bucket to collect any aphids that are dislodged from the plants. In seedling stage alfalfa, a treatment should be considered if you find 5 aphids per stem. In alfalfa less than 10 inches tall, a treatment should be considered if you find 40-50 aphids per stem. The treatment threshold for alfalfa 10 inches or taller in height is 75- 100 per stem. Insecticides labeled for pea aphid control in alfalfa include Furadan, Baythroid (suppression), Proaxis, Warrior, or Lannate.

You should also begin sampling for alfalfa weevil larvae. Look for small larvae feeding in the tips of plants producing a round, pinhole type of feeding. Once you detect tip feeding, a full field sample should be taken. You will want to avoid treating fields too early since it may result in multiple applications. In general, no treatment should be needed before you observe 50 percent of the tips with feeding damage. A more accurate way to time an application and try to avoid multiple insecticide applications would be to sample stems and determine the number of weevils per stem. A minimum of 30 stems should be collected per field, placed top first in a bucket to dislodge larvae from the tips and then count the number of weevils per stem. The following thresholds, based on the height of the alfalfa, should be used as a guideline when making a treatment decision: up to 11 inches tall - 0.7 per stem; 12 inches tall - 1.0 per stem; 13 - 15 inches tall - 1.5 per stem; 16 inches tall - 2.0 per stem and 17 - 18 inches tall - 2.5 per stem. Numerous pyrethroids are now labeled for alfalfa weevil including Baythroid, Mustang MAX, permethrin, Proaxis and Warrior. Furadan, Imidan, Lorsban, Lannate and Steward are also labeled for alfalfa weevil control.

Field Corn

We will again be running a pheromone trapping program for black cutworm moths. As of this date, only one moth has been caught in the Seaford area. Although no precise numbers are available, moth catches of 9 to 15 moths per 7-day period have been associated with a moderate to high potential for cutworm outbreaks in field corn. Larvae should be large enough to begin cutting when about 300 base-50 degree-days have accumulated since peak moth activity and egg laying. Pheromone trap catches can help determine when peak moth flight and egg laying occurs; however, they cannot predict the amount or magnitude of cutting that will occur. The presence of a major flight only means that the potential for an outbreak exists. Adverse weather, lack of adequate food for newly hatched larvae, predation, and disease can reduce larval populations. You can use pheromone trap and degree-day information to estimate or predict when first cutting will occur. Scouting of seedling corn near the first cutting date is the best way to determine whether a problem exists. Just a reminder, if you plan to tank-mix a pyrethroid with an herbicide for cutworm control, it should be done at, or immediately following planting. Pyrethroids combined with early burn-down applications, 2-3 weeks before planting, have not provided effective control.

Timothy

We are starting to hear reports from other areas of cereal rust mite activity. As soon as fields green up, you should begin checking for cereal rust mites and the early signs of infested leaves, especially in fields with problems in past years. These mites are microscopic, so the use of a 20x-magnifying lens is necessary. If rust mites become a problem, Sevin XLR Plus still has a 24(c) label on timothy for rust mite management. The following is a link to the 24 (c) label for Delaware. (http://www.cdms.net/ldat/ld332028.pdf). You must have this label in your possession at the time of application.

Wheat

Be sure to begin sampling fields by mid-April for cereal leaf beetle activity. We have found the first evidence of adult feeding, so fields should be scouted early for the presence of egg masses. In recent years, the threshold for cereal leaf beetle has been adjusted to include sampling for eggs, especially in high management wheat fields or areas where problems were experienced the previous year. The eggs are elliptical, about 1/32 inch long, orange to yellow

in color when first laid, changing to a burnt orange prior to hatching. Check our website for pictures of cereal leaf beetle adults, larvae and eggs:
http://www.udel.edu/IPM/facts/clbpictures.htm
Generally, eggs are laid singly or in small scattered groups (end-to-end) on the upper leaf surface and parallel to the leaf veins. Cereal leaf beetle larvae are brown to black, range in size from 1/32 to 1/4 inch long, and eat streaks of tissue from the upper leaf surface. Since cereal leaf beetle populations are often unevenly distributed within the field, it is important to carefully sample fields so that you do not over or under estimate a potential problem. Eggs and small larvae should be sampled by examining 10 tillers from 10 evenly spaced locations in the field while avoiding field edges. This will result in 100 tillers (stems) per field being examined. Eggs and larvae may be found on leaves near the ground so careful examination is critical. You should also check stems at random while walking through a major portion of the field and sampling 100 stems. The treatment threshold is 25 or more eggs and/or small larvae per 100 tillers. If you are using this threshold, it is important that you wait until at least 50% are in the larval stage (i.e. after 50% egg hatch).

Agronomic Crop Disesases –

Bob Mulrooney; Extension Plant Pathologist;
bobmul@udel.edu

Soybean Rust

One of the key aspects of managing soybean rust in the United States is to know where the disease is at all times. Keeping track of where soybean rust has successfully overwintered is a major piece of the "puzzle". Specifically, we know that soybean rust will die back to the deep southern United States each winter; however, where the soybean rust fungus survives the winter, and to what extent, will vary each year and will play a major role in determining the overall soybean rust risk the following spring and summer.

The soybean rust fungus, *Phakopsora pachyrhizi*, survives the winter primarily on the perennial legume vine, kudzu. Generally, kudzu foliage is killed back in areas where winter temperatures reach 28°F or lower for an extended period of time (i.e., overnight). I say generally, since scientists in Alabama, Florida, and Georgia have found out this winter that low levels of rust-infected kudzu leaves can survive in protected areas well north of the so-called "kudzu kill line". These situations occur most frequently in urban areas next to buildings, under highway bridges, in culvert pipes, or on trees. There is some question as to how important these rogue kudzu finds are to overall soybean rust disease potential. My guess is they will play a minor role, overall. Locally, however, they could play an important role in spreading soybean rust to nearby soybean or kudzu earlier than would have otherwise occurred. At the very least, involved kudzu patches will almost certainly be re-infected earlier in the spring than would have otherwise taken place.

The USDA provided funds to Land Grant Universities in Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, and Texas to monitor various locations for soybean rust during the winter of 2005-06. As of early March, there were many more known infected sites in AL, FL, and GA than there were at this same date in 2005. Fortunately most of these sites were frozen within the last several weeks. There are other infected sites in mid-Florida and south that are active at the present time. Kudzu is also greening up now in most of northern Florida, including the panhandle. The best advice again is to keep up-to-date with rust development down South. It is too hard to predict if there is increased risk of infection this season given the weather fluctuations in the South.

To stay current, check the national soybean rust website at http://www.sbrusa.net/ to get the latest information. Weekly Crop Update will also carry a soybean rust update each week. The same fungicides that were labeled through the emergency exemption process are still labeled for 2006, so the fungicide arsenal is the same as last year with plenty of product available, as I understand it.

On the local scene, the Delaware Soybean Board has approved funding for monitoring soybean rust in addition to resources from the Delaware

Dept of Ag, USDA, and DE Cooperative Extension. The 5 sentinel plots will again be established throughout the state and 20 grower fields will also be monitored during the season for soybean rust once flowering begins.

Stripe Rust on Wheat

Last season was the first time that stripe rust had been confirmed in DE. Historically it has primarily been a wheat disease in the Pacific Northwest, California and Mexico. It has been moving east in the past ten years and outbreaks were reported in 2000 in 20 states with significant losses reported in Arkansas. In 2003 detections were made in the south central states of AR, TX, OK, LA, GA and FL. In 2005 it caused damage in DE, MD and VA. The fungus could overwinter locally as fungus threads (mycelium) in infected leaves if the temperature did not fall below 23° F. Since this would rarely happen, the fungus spores would have to move on the wind north from infected crops in Mexico each year as does wheat leaf rust and most other rust diseases of agronomic crops. This rust fungus has no known alternate hosts so it is not known to reproduce sexually. The fungus prefers cool temperatures especially at night. For this reason the disease occurs earlier than leaf rust, which has not been a problem here for some time. Last season small infected areas of wheat fields could be identified because of the leaf yellowing produced by the infection. Upon closer inspection the infected leaves had yellow pustules in linear stripes down the leaf blades which are diagnostic for stripe rust.

Since it starts in small areas first, frequent scouting for stripe rust and fungicide applications made when the disease is first observed would provide good control, provided that timely fungicide applications can be made. Some growers sprayed fungicides for control when the disease was first seen last season, with varying results. Like soybean rust, stripe rust will be controlled best by protective (preventative) applications of either strobilurin or triazole fungicide classes. If the disease is present, straight triazole fungicides such as Tilt or Propimax or combinations of both fungicide classes such as Quilt or Stratego will be best. The stripe rust spores rapidly lose viability as the temperature approaches 70° F. If the temperature stays between 50 and 60° F with intermittent rain or dew, stripe rust can develop very rapidly. Pay attention to the weather forecast if stripe rust is present to help determine if spraying is worthwhile for your situation.

Last year enough stripe rust developed in our wheat variety plots that stripe rust ratings were obtained for the varieties in the 2005 tests, and can be viewed online at http://www.udel.edu/varietytrials/small_grains/index.html , or are available from the county Extension offices. Variety resistance is the best control for stripe rust.

Stripe rust on wheat

Has the Nitrogen on Winter Wheat been Lost this Spring?

– *Greg Binford, Associate Professor, Plant and Soil Sciences*; binfordg@udel.edu and *Richard Taylor, Extension Agronomist*; rtaylor@udel.edu

Most soils require the addition of nitrogen (N) fertilizer to optimize winter wheat yields. The most common form of fertilizer N that is applied to winter wheat in this region is UAN solutions, which are mixtures of urea and ammonium nitrate that normally range from 28 to 32% N. It is well know that when urea fertilizer is applied to soils and left on the soil surface without incorporation that a percentage of this urea can volatilize and be lost into the atmosphere as ammonia (NH_3) gas. Therefore, urea and the urea portion of UAN fertilizer are susceptible to loss through volatilization when left on the soil surface. Volatilization occurs at a relatively slow

rate when air temperatures remain below 65° F and the soil surface in contact with the urea remains acidic. Volatilization can be prevented if urea is incorporated into the soil with tillage. In addition, volatilization can be prevented if urea is washed into the soil with about 0.3 to 0.5 inches of rain or irrigation water.

This spring UAN fertilizer has been applied to most winter wheat fields and many of these fields have had no rain or irrigation since the fertilizer was applied. Until this week, there had been no significant rainfall since mid-February in most of this region. This means that the UAN fertilizer has been lying on the surface of the soil for several weeks on many fields. This raises the question of how much N has been lost from these fields this spring. Unfortunately, we cannot answer this question with certainty because we can find no research that has evaluated UAN applications to winter wheat under these exact conditions. As anyone knows who lives in this region, the dry conditions we've experience this spring are quite unusual.

Nonetheless, we can make some predictions based on our knowledge of conditions needed for volatilization of urea from UAN applications. First of all, about half of the N in UAN solutions is in the urea form, the other half of the N is ammonium nitrate. The only portion that we have to worry about volatilizing is the urea portion. Volatilization of N from urea is dependent on several conditions. One of the most important is temperature. The potential for volatilization is much greater with warm temperatures compared to cool temperatures, which means that volatilization is normally much less in March than in May or June. Another important factor that effects volatilization is soil moisture. Volatilization is limited when soil conditions are extremely dry.

Because most of the UAN fertilizer was applied during relatively cool conditions and because the soil has been so dry the past few weeks, our expectation is that we have not lost significant portions of the UAN fertilizer that has been applied this spring to winter wheat. If a field has received UAN fertilizer and only a small amount of rainfall (e.g., about 0.1 inches), the urea could be susceptible to some volatilization if temperatures are warm enough. Again, remember that only the urea portion is susceptible to loss. Losses of N through leaching or denitrification require excessive amounts of rainfall, so the chances that N has been lost by either of these two mechanisms this spring is virtually zero.

Start Reducing Corn Yield Losses at Planting

– *Richard Taylor, Extension Agronomist*; rtaylor@udel.edu

With the on again and off again cold weather, try not to be over anxious to plant corn until the soil temperature warms up above 50° F and prospects are for it to continue to rise. Research has shown that yield losses from uneven emergence can be as high as 20 or more bushels per acre, although losses of 8 to 12 bu/ac are more common. Additionally, in cold soils emergence can take from 2 to 3 weeks or even more to occur, placing the germinating seed under significant risk for disease, insect, or other types of injury. Yield losses from uneven and poor emergence can be much greater on those irrigated fields where you are trying to achieve maximum yield. With the added inputs, irrigation costs, high cost and high quality seed, your economic loss could be substantially higher than just from lost yield. Watch the weather and soil conditions closely, and choose the most favorable time for planting, especially the high yield fields, so that even, uniform emergence is assured.

Nitrogen Management for Grass Hay and Pasture Fields

– *Richard Taylor, Extension Agronomist*; rtaylor@udel.edu

This year's dry spring has raised concerns about the effectiveness of nitrogen (N) topdressed on pasture and hay fields as well as small grains (see "Has the Nitrogen on Winter Wheat been Lost this Spring?" in this issue). For pastures with less than 25% of the stand composed of legumes (red clover, white clover, etc.) and grass hay fields also with less than 25% legume, an application of 50 to 70 lbs N per acre now, should increase the yield potential for the first

few grazing cycles (under rotational or intensively managed grazing systems) and the first hay harvest. Although the dry spring will remain a concern with respect to ultimate yield potential, there usually is adequate soil moisture in the rooting zone to support the initial spring flush of grass growth in all but the lightest (sandiest) of soils. Additional N applications will depend on changes in the weather pattern and reestablishment of the subsoil moisture.

In future issues of Weekly Crop Update, I will advise you more on N management on pasture and grass hay fields. Continued dry weather will significantly affect your future fertility decisions and will impact your nutrient management plan (NMP). To assist you or your nutrient management planner and to update your NMP, you will need to keep records not only of what actions you take but also why nutrient management decisions were made. It is my hope that that these articles will provide you with explanations to include in your NMP as changes are made.

Grain Marketing Highlights - *Carl German, Extension Crops Marketing Specialist*; clgerman@udel.edu

U.S. Planting Intentions Summary
U.S. corn growers intend to plant 78.0 million acres of corn for all purposes in '06, down 5 percent from '05 acreage according to USDA's March 31st Planting Intentions Report. The report surprised many commodity traders and market analysts because the acreage shift away from corn planting was larger than anticipated. If realized, this would be the lowest U.S. corn acreage since 2001 when 75.7 million acres were planted. Intended acreage is down from last year in most states as producers have indicated a willingness to switch to other, less input intensive crops due to high fuel and fertilizer costs. Analysts will continue to ponder whether producers will plant more corn than the report indicated. The market has reacted by bidding the price for new crop corn higher, perhaps an attempt to bring more acres into corn production. This report will not be confirmed until late June when USDA issues the actual planted acreage report.

U.S. soybean growers intend to plant 76.9 million acres in '06, representing an increase of 7 percent from last year. If realized this would be the largest planted area on record for U.S. soybeans. This report, combined with harvest progressing normally in the Southern Hemisphere, has resulted in new crop soybeans bidding lower. In addition to negative fundamentals, the technical side of the soybean market has gained additional bearishness resulting, in part, from this report. New crop development and yields in the U.S. this growing season will determine whether new crop beans will retest last fall's lows. For the moment, new crop soybean prices are headed in that direction. Key technical support levels have been taken out in the last three trading sessions going into today's market opening.

U.S. wheat production is expected to total 57.1 million acres, down slightly from '05. If realized, this would be the lowest total wheat acreage since 1972. Winter wheat planted acreage is 41.4 million acres, up 2 percent from last year. Of the total, 29.8 million acres are Hard Red Winter, 7.42 million acres are Soft Red Winter, and 4.22 million acres are White Winter wheat. The '06 other spring wheat planted acreage is expected to total 13.9 million acres, down 1 percent from '05. Of the total, 13.2 million acres are Hard Red Spring wheat. Intended Durum wheat planted acres are placed at 1.83 million acres, down 34 percent from last year, the lowest Durum wheat acreage since 1961. On Monday USDA issued its first Weekly Crop Condition Report. U.S. winter wheat ratings were very low, with only 38 percent of the crop rated as good to excellent as compared to 68 percent in those categories a year earlier. Thirty-one percent is rated as poor or very poor, compared to only 6 percent last year. Soft Red Winter and White wheat states posted mostly normal ratings.

Stocks in All Positions Report Summary
Stocks of U.S. corn in all positions were placed at 6.987 billion bushels as of March 1 as compared to 6.756 billion bushels for the same time last year. U.S. corn exports have been very

good in the recent past with some expecting USDA to possibly increase the corn export number thereby reducing carryover in the April crop report.

U.S. soybean stocks in all positions were estimated at 1.669 billion bushels, as compared to 1.381 billion on March 1 last year, amounting to slightly over 287 million bushels more soybeans held in the U.S. this year on March 1 as compared to last year.

U.S. wheat stocks in all positions were placed at 972 million bushels, as compared to 985 million bushels last year.

Market Strategy

The next crop report to be issued by USDA is scheduled to be released on Monday, April 10th. It will be interesting to see if there are any supply/demand adjustments made to the balance sheets based upon the information projected in the planting intentions report and from recent export business. Nevertheless, it is now time for the market to bid for acres. The bidding process is indicative that now is not the time to advance new crop corn sales unless one has not already priced the first one-third of intended production (Dec '06 currently bidding at $2.67 per bushel). It should be noted that the bidding process can take one or more of several scenarios, e.g. (1) bid new crop corn price higher, beans lower or (2) bid new crop beans lower, corn price stays near current levels, etc. New crop soybeans, currently trading at $5.90 per bushel for Nov '06 futures with the local basis bid at 10 to 20 under equates to a forward cash price of $5.70 to $5.80 per bushel. Something for those that have not done any new crop soybean pricing to consider. This also happens to be the time of year that U.S. soybean exports typically slacken.

Assuming that we need to plant more corn acres and less soybean acres in the U.S. this spring, then we have probably already seen the lowest corn acreage and the highest soybean acreage numbers. As we begin the 2006 row crop planting season one thing is clear and that is that we are likely to be in for some volatile times in the commodity markets. U.S. weather now becomes a dominant factor in commodity trading. Along that line, U.S. weather has been extremely volatile of recent times and is likely to remain that way for the foreseeable future.

Weather Summary

http://www.rec.udel.edu/TopLevel/Weather.htm
Week of March 30 to April 5, 2006
Readings Taken from Midnight to Midnight
Rainfall:
0.05 inch: April 1 0.13 inch: April 3 0.30 inch: April 4
Air Temperature:
Highs Ranged from 76°F on April 1 to 52°F on April 5.
Lows Ranged from 51°F on April 1 to 30°F on March 30.
Soil Temperature:
56°F average.
(Soil temperature taken at a 2 inch depth, under sod)

The Weekly Crop Update is available online at http://www.rec.udel.edu/TopLevel/Publicat.htm

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Associate – Vegetable Crops

Cooperative Extension Education in Agriculture and Home Economics, University of Delaware, Delaware State University and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Delaware Cooperative Extension, University of Delaware. It is the policy of the Delaware Cooperative Extension System that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age or national origin.