

2015 UK-IPM Annual Meeting of Advisory Committee

Video Conference- Lexington, Elizabethtown and Princeton

March 30, 2015 - 12:30 Noon Central time

Attendance:

Princeton –Win Dunwell, Susan Fox, Colette Laurent and Patty Lucas

Lexington – Carey Grable, Nicole Gauthier, J.D. Green, Janet Lensing, John Obrycki, John Strang, Paul Vincelli, Jen White and Ricky Yeagan

Hardin County, Elizabethtown- Ric Bessin and Richard Preston

The meeting was called to order at 12:30 CT by Ric Bessin. Those attending at each video conference site were asked to introduce themselves.

1. Update from 2015 National IPM Symposium and National & Regional IPM Coordinators Meeting

Dr. Bessin participated in the 2015 National IPM Symposium and IPM Coordinators meetings in Salt Lake City, Utah on March 22 – 26.

- Changes being implemented by the Southern Region IPM (SRIPM) Center includes moving from 4 RIN (regulatory information network) regional contacts to state contacts to deal with pesticide issues. Patty Lucas will take on additional responsibilities to act as a state contact for KY to the SRIPM Center for the collection of data queries from them and sharing information on regulatory decisions regarding IPM. Darrel Hensley, University of TN, previously served as the regional contact for Kentucky.
- Feedback was received on the 3-year CPPM (IPM) granting process from Southern Region. KY, as well as most states in the Southern Region, did not do well in this most recent round of CPPM grant awards. Many went from being rated in the high or exceptional category to the medium category resulting in significant budget cuts. One issue pointed out by SRIPM Center staff was the need to make better use of the logic model. The logic model needs to be developed first, starting with the determination of your outcomes/impacts then gradually working backwards to determine outputs then inputs. Once the logic model is completed, you write your proposal asking for funding to do activities resulting in the outcomes. This results in a more focused proposal built around your intended outcomes for your program. It was also pointed out that many proposals from the Southern Region requested funding for the same activities they have always done in the past negating the outcomes of their IPM programs.
- Regarding the current CPPM grant, Kentucky was successful. Year 1 reports coming up soon. We need to submit the state report 90 days before first anniversary of the grant resulting in reporting on first 9 months of Year 1. Year 2 will be the same but will be reported on full year in

2016. With August anniversary, **Year 1 reports are needed by May 15**. Reports need to include activities, outputs, and outcomes (especially changes in behavior and changes in knowledge).

- There has been a mandate by EPA for each state to develop a Pollinator Protection Plan that is to be state administered requiring EPA approval. EPA has developed a list of components the plan should address. Dr. Tammy Horn, Kentucky State Apiarist, will be taking the lead on this project. It will require input from a broad range of stake holders including beekeepers, producers, extension specialists, and KY Farm Bureau with all being involved in the development of this plan. Plans are due to the EPA by 2017. There is speculation that pesticide labels for states that do not have plans may differ from those that have developed plans.

2. Working Group Reports (5 minutes for each group representative)

- Vegetable IPM group- Dr. Ric Bessin presented the report since Dr. Shubin Saha, the coordinator, was unable to attend. Outputs reported included 7 publications, 13 educational trainings including a recently completed webinar series on high tunnel blueberries that will include an evaluation of participants to determine the value of the series. A total of 916 growers from Kentucky, Illinois, Indiana, Michigan and Ohio participated in the webinar series.
- Fruit IPM group - Dr. Nicole Gauthier, fruit IPM working group coordinator, presented the fruit report. The fruit group had just started in the last granting cycle that was Year 1 of the 3-year grant terminated by the new Farm Bill resulting in only a one year grant. This has caused some overlap in projects as the group is now only in its second year. A homeowner/consumer Facebook, Life in the Orchard, has been developed for fruit crops to help consumers understand how fruit is grown. Publications developed include the Apple Scouting Guide. Two more guides are planned for this summer possibly grape, strawberry or peach. Trainings/meetings included 2 apple field days and agent trainings. Efforts are being made to survey growers to measure outcomes such as changes in knowledge. A focus group consisting of apple growers was formed, surveys conducted and work has started on crop profile and PMSP. The information collected will be used as a guide for this remaining grant cycle. A mobile web site/app is planned to include the mid-west fruit spray guides and include cultural practices. Purdue is also developing a mobile version so this may change. The IPM web site is also being revamped to combine entomology, horticulture and plant pathology publications on a fruit page to give one stop shopping for growers. There is also the possibility that working with the SRIPM center, some of the KY identification scouting guides may be made into apps at no charge. However, this would be only in an iPhone format resulting in availability to 50% of the market. This will be explored further.
- Nursery Crops IPM group- Carey Grable and Dr. Win Dunwell presented for Nursery Crops. Carey discussed viewership and impact of IPM funded meetings and meeting recordings placed on YouTube. For the 2013-14 workshop the average value placed on the workshop by attendees

was \$2,800/ attendee or \$567 / presentation. Multiply this by 6,570 views of IPM videos gives an impact of \$3.7 million. Half of this was from the summer 2013-14 IPM workshop. A presentation was made at the 2015 IPM Training for field crops on the UAV project and was well received. Nursery crops has purchased a 3D robotics X8 UAV. The UAV is working with a GoPro camera attached and will be used for IPM videos, NDVI imagery, scouting and demonstrations pending on FFA approval. They have been assigned a university liaison with the FAA. Carey is also talking with Agriculture Engineering to avoid conflicts with other departments and also trying to talk with the UAV consortium. It may be that multiple departments do not need to be applying for a license to fly. Carey is waiting to hear from Agriculture Engineering before going further with the FAA. In August another program is planned on nursery scouting and hopefully include a scouting presentation using the drone. They have been very successful in getting nurseries to spot treat with pesticides for insects and do more scouting. Managers and employees have bought into the program. Hopefully this fall they will be able to demonstrate the drone and how to analyze the video collected to identify an area with a plant issue allowing you to go directly to that area. The Nursery Crops group has had several interrelated programs. They will be submitting an SCRI grant for the Nursery Crops IPM Pro and Lite mobile apps. KY is a part of and has been a part from the beginning. It was suggested someone tell Washington not to put out letter of intent request on March 1 and due March 30 when everyone is on Spring Break or outside digging trees. Makes a tough time period for getting support from growers because they are so busy this time of year.

- Grain Crops IPM group- Colette Laurent, filling in for Carrie Knott, presented Grain Crops. The Wheat Science Group has been combined with the Corn Soybean Group to form a single group, Grain Crops. The foci of the Grain Crops IPM Working Group are to complete Early Bird Meetings, Winter Wheat Meeting, Agent Trainings, Field Days, IPM Field School, to monitor grain crop diseases and invasive insects, and to distribute educational publications in a timely manner to interested parties. To date, attendance at the Grain Crops Early Bird Series (Henderson Co. 12/8/14, Graves Co. 12/9/14 & Hardin Co.12/10/14) and the Wheat Science Groups Winter Wheat Meeting (1/6/15) has exceeded 250 people, which represented almost 650,000 acres of grain crops production. Of the attendees, 70 Certified Crops Advisors (CCA) and 126 Kentucky Pesticide Applicators, both Private and Commercial, were present for 280 and 840 hours of CCA and Kentucky Pesticide Applicators continuing education credits, respectively. Based upon surveys following each meeting, participants valued the information received as \$9/A, which was an estimated value of \$5,850,000. One agent training was also completed March 20, 2015. A total of 21 county agricultural agents attended, representing more than 160,000 acres of winter wheat and 6,000 acres of winter canola. The agents valued the training for their respective county of more than \$10/A, which was an estimated value of almost \$2,000,000.

Members of both the IPM Corn/Soybean and IPM Wheat Science Working Groups continue to distribute timely information to producers and interested parties. To date, members of the Grain Crops IPM Working Group have posted 26 blogs to the Grain Crops Update blog (<http://graincrops.blogspot.com/>), written 6 Wheat Science research reports, 4 Wheat Science newsletter articles, and submitted one peer-reviewed journal article to *Crop, Forage & Turfgrass Management* (a practitioner focused publication) to guide producers in the implementation of IPM strategies and techniques.

The remaining Grain Crops IPM Working Group objectives are scheduled to be completed. Nine Agent Trainings are scheduled from April to November 2015, the Wheat Field Day is scheduled for May 12, the Corn and Soybean Field Day will be July 30, various IPM Field Schools are being planned, and efforts to monitor grain crop diseases and insects are planned. Grain Crops IPM demonstration plots will be incorporated into both of the field days, the agent trainings and IPM Field School. The IPM Wheat Science Group and the IPM Corn/Soybean Working Group Annual meeting, which streamlines the before mentioned IPM educational programs, is scheduled for August 12-13, 2015 in Bardstown, KY. Records on invasion, location and intensity of the invasive stink bugs, (Kudzu bug, BMSB) as they approach our major corn/soybean production areas will also be documented and publicized in extension and research publications as data is collected. Plant disease diagnostic records continue to be placed into the National Plant Diagnostic Network database and state-specific databases.

- Paul Vincelli reminded everyone that Carl Bradley will be joining the UK faculty as of July 1.

3. Pesticide Safety Education Program Update – Ricky Yeargan

Agriculture and Natural Resources Programs applied for and receive funding last September from national pesticide safety education stakeholder group, an umbrella of companies through Crop Life Sciences, who recognize that land grant based PSE programs in many states are in bad shape due to decreases in funding and work load increases. They have funded a 3-year project to develop a business plan and to look at possibilities to make the program sustainable, more robust and possible. Meeting with the IPM advisory group since one of the requirements of this 3-year grant is by the end of Year 1 to develop a non-University stake holder group. University personnel will be involved later in extension initiatives. They are now looking for people impacted by PSE, whose livelihood depends passing the tests and obtaining the needed continuing education hours. People are needed who are willing to provide support if the need arises to open up administrative regulations, to request part of product registration fee, etc. People who would be willing to go to assist in obtaining sustainable revenue sources to support a PSE program. If you have any suggestions for committee members please send them to Ricky Yeargan. Ric Bessin suggested PSE be involved with the Pollinator Protection Plan. At the Regional IPM meeting at Salt Lake City, during a discussion of IPM priorities, it was stated that the KY

state priority of dealing with dicamba, 2, 4-D, resistant crops resulting in drift issues is a pesticide safety education issue not an IPM issue.

4. Review of 2015 IPM Priorities

John Strang suggested something for vole control in Blueberries. There is presently no control. It was determined that a label change was needed. A pesticide clearance submission needs to be made through IR4. This can be done fairly quickly as the first IR 4 meeting will be in June.

IPM priorities are emphasized because when grant proposals are submitted needs/priorities need to be tied in with state and regional priorities. Current KY priorities dealing with herbicide drift can be state priorities but the Southern Region IPM center feels they are not IPM priorities as they are pesticide safety issues. In previous priorities list, herbicide resistant palmer amaranth was changed to herbicide resistant weeds as multiple weeds are now resistant. The resistant weed issues are clearly a top IPM priority in the Southern region. There is a debate on the idea of zero tolerance of the resistant weeds. Southern region IPM priorities are posted on web site however the most current may not be. A link to the southern region priorities from March 2014 is available at -

<http://www.sripmc.org/Policy/Priorities/index.cfm> and the 2014 priorities are at -

http://www.sripmc.org/Policy/Priorities/SERA003_2014priorities.pdf

5. Updating Goals and Objectives

- What are the important questions/problems related to pest management that we need to be addressing? What are we missing out on? What changes do we need to be seeing as a result of the IPM program?

Should see change in economics, use of pest controls that are more environmentally sensitive, fewer bee kills, fewer cases of herbicide drift (this would be difficult to confirm or document), a possible system of reporting herbicide drift. The EPA has a web site for the reporting of bee (pollinator) related kills making it easy for people to report these kills. The verification process for this site was not known. EPA is emphasizing the honey bee issues and demonstrating pollinator health is a priority. Hopefully there is a way these reports are validated or passed on to state departments of agriculture for validation. Susan Fox suggested that a system could be developed for use in tractors that could alert farmers that they are in a situation that could result in drift. The AG weather center does issue advisories on days that are good for spraying and also warnings on days that are bad. Producer, Richard Preston, added that some producers have been dealing with these issues for years and others will also be dealing with them now and using the information on the AG weather center is very important especially a way of getting information on possibility of diversions on would be very helpful. This will be more important as producers start to use the dicamba, 2, 4-D, resistant crops and spray into warmer weather.

Nicole Gauthier reported tree fruit growers are asking for a digitized record keeping system including fungicides and insecticides that allows them to record the number and type of sprays to help track when they have reached a maximum number of applications per season or ounces/A. This may be something other working groups are interested in and could take a large sum of money so maybe we should start thinking about this as a group. Win Dunwell added that the IPM pro app has this capability. Growers enter the date, product and rate of what they sprayed, and when they spray the next time, this information will come up. This app is only for horticulture including only pesticides for nursery crops. This app was by IPM SNIP lead by Amy Fulcher. Approximately 5 years ago, a private company was paid over \$20,000 to develop the app as they could not find a university at that time which could develop android and Apple apps. It has now been operating for 3 to 4 years. This shows it can be done and in a mobile device. Ric Bessin added the vegetable growers may also be interested in this type of app.

- What methods do we employ to distribute the results / answers?

Ric Bessin asked, "Are we using effective methods to get results to our stakeholders?" Working groups are using one of three methods: meetings and field days, printed publications and YouTube videos. Carey Grable volunteered to show anyone who is interested how the Nursery Crops goes about producing the content for their videos. He said it is not that difficult to record a meeting and increase impacts. Additional examples of groups using social media include The Grain Crops Blog, Plant Pathology Facebook site. Susan Fox stated that when alerts are issued by the fire blight model or for fall armyworm, she sends post cards to her mailing list. She feels that producers do pay attention and start looking for the problem. She stated the models are helpful.

Nicole Gauthier asked, "How do we document impact during this grant cycle?" Is this something we need to start talking about separately now to be prepared for the next grant cycle?

Ric Bessin stated, impact is measured as changes in economics, environment and human health or social conditions. Outcomes include changes in behavior and changes in knowledge. There are report outcomes but few report impact as it is more difficult to measure. Many groups use pre and post surveys to measure outcomes, changes in behavior.

There is a new program assessment evaluator for the SRIPM center. The center is trying to put more emphasis on program evaluation. The Western region has a program evaluation tool box you can get to from their web site at <http://ipmimpact.ucanr.edu/>

Everyone should be interested in program evaluation. We should contact the SRIPM center to see what type of support is available for program evaluation. The theme from the National IPM meeting was that some of the best IPM in the country is done in the Southern Region and we are terrible at telling others what we do. Patty Lucas stated that in the past in relation to impact,

the KY program has been told it needed to be more coordinated on our impact measurements such as everyone having at least one or two common goals and everyone measuring that. It was decided that this was something we need to work on over the coming months.

It was suggested that Pollinators will be a hot topic. EPA has developed new insecticide labels especially for the Neonicotinoids that have new icons designed to attract attention. However, the labels are vague in areas such as notification of bee keepers in your "area." Area is not defined, no solid guide lines in the labels. This will be a discussion area for the development of the pollinator protection plan. One thought was that if a producer is going to use a chemical that places bees at risk, this could be posted to a web site and beekeepers in the area of the spray would get a notice that an application will be made on a specific date. This would be done anonymously, farmers and bee keepers are not identifies. Bee keepers do not like their information shared online as it can result in having their hives stolen.

Susan Fox asked if farmers have ever been surveyed as to how they are scouting fields and what level of scouting they are doing. To do this we would need to define scouting, as the procedures used would vary depending on the crop. This could be a common question used in all program evaluations. We would need to develop a base line then hopefully show improvement.

An electronic survey will be sent to the group to help determine core question that could be used by all programs for program evaluation.

With no other business, meeting adjourned at approximately 1:45 pm CT.

2014 Kentucky IPM Priorities

March 30, 2015

60 responses

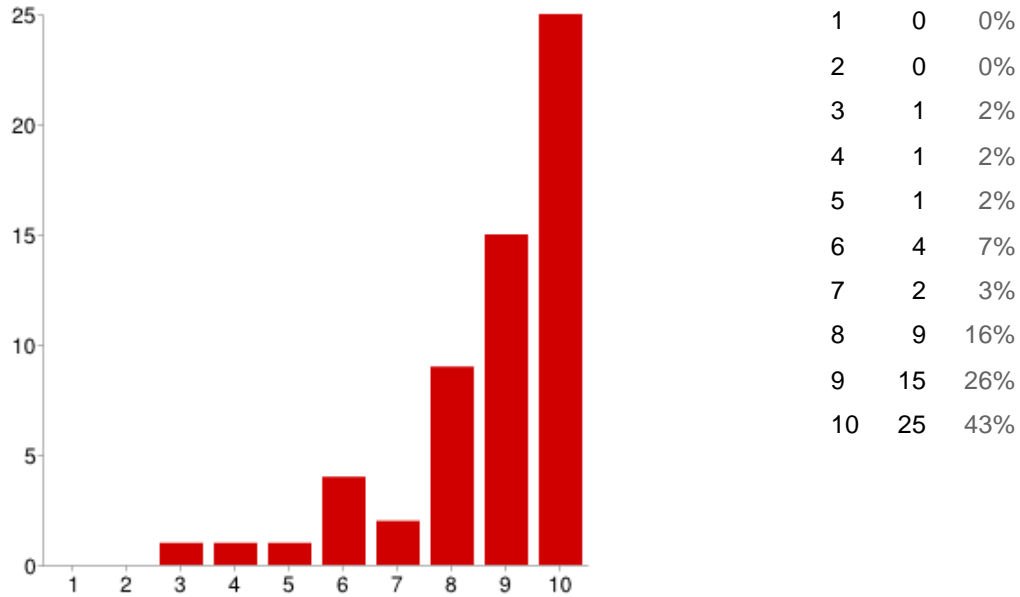
Results Key -

FIRST COLUMN – Ratings of 1 to 10, 1 being not important and 10 being extremely important

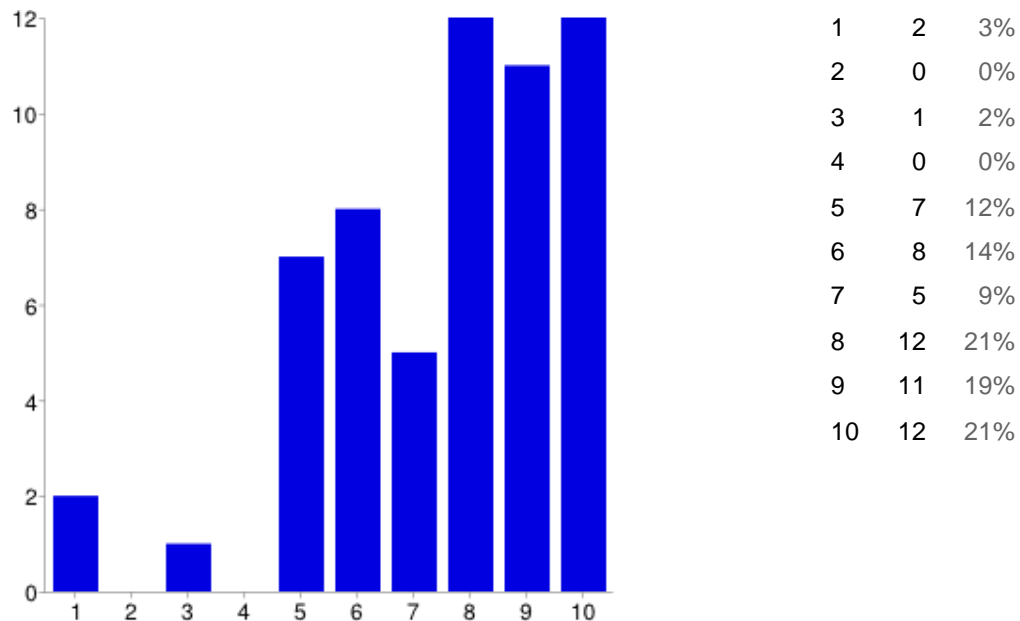
SECOND COLUMN – Number of responses for that rating

THIRD COLUMN – Percent of those choosing that rating

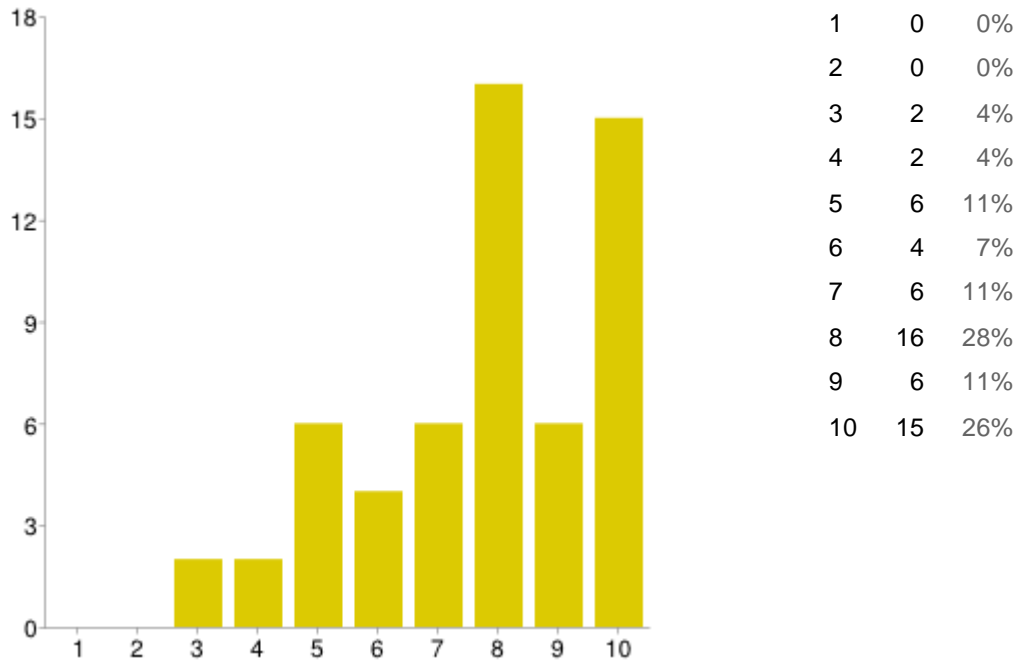
- The development of glyphosate resistance by water hemp, palmer amaranth and horseweed/marestail and the impact this will have on no-till by bringing back tillage in areas where this is a problem. This will also lead to increased use of 2,4-D which is problematic for nurseries and producers of other horticultural crops.



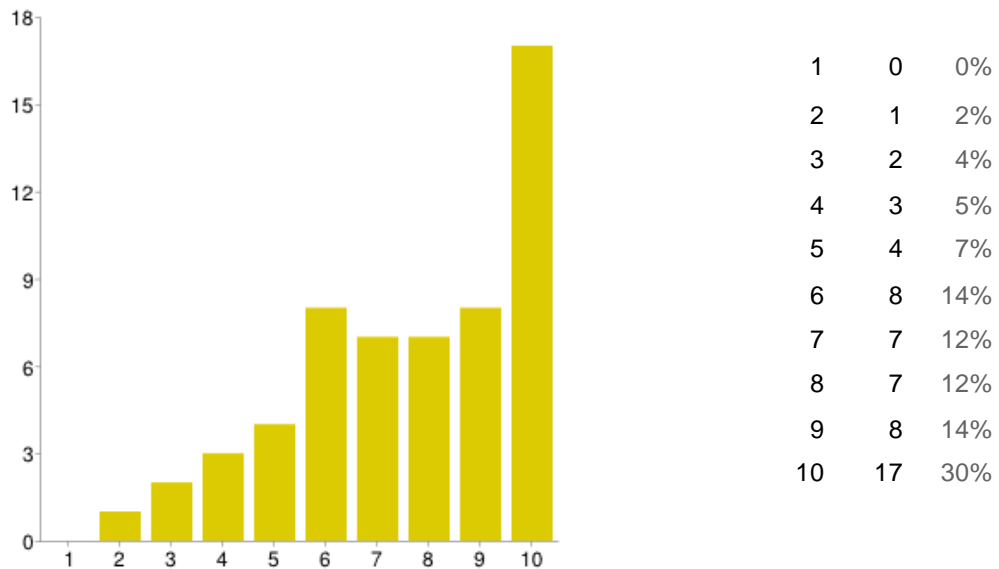
- Abandonment of IPM practices and the use of calendar sprays when applying fungicides and insecticides. Concern is this can lead to the development of resistance to fungicides and insecticides such as the now documented cases of Froyeye leafspot resistance to strobilurin.



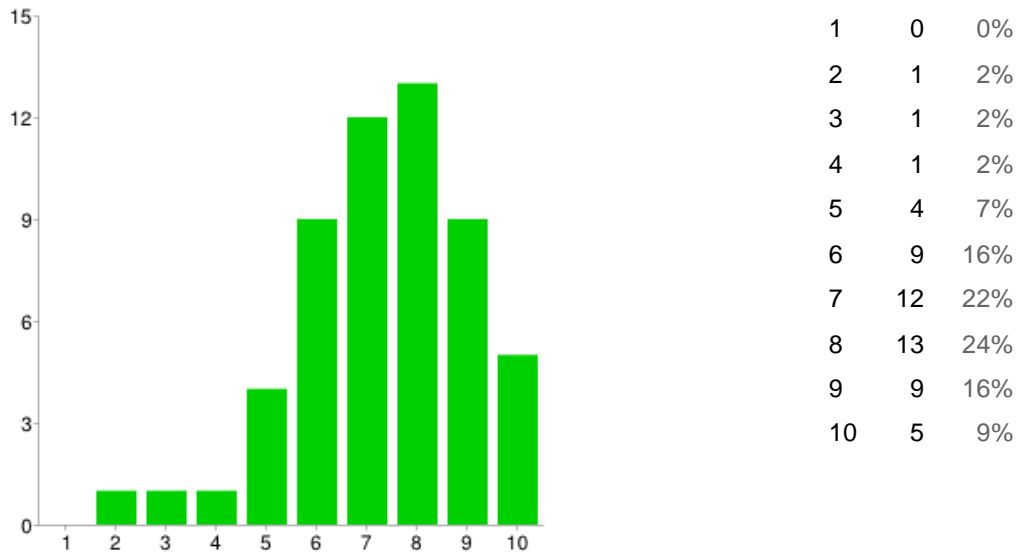
3. Need to emphasize the maintenance of weather stations in Kentucky to provide critical information and data needed by producers and researchers. This information needs to become more easily accessible through the use of new technologies such as app for phones and possibly the development of tailor made products to meet the needs of growers and homeowners.



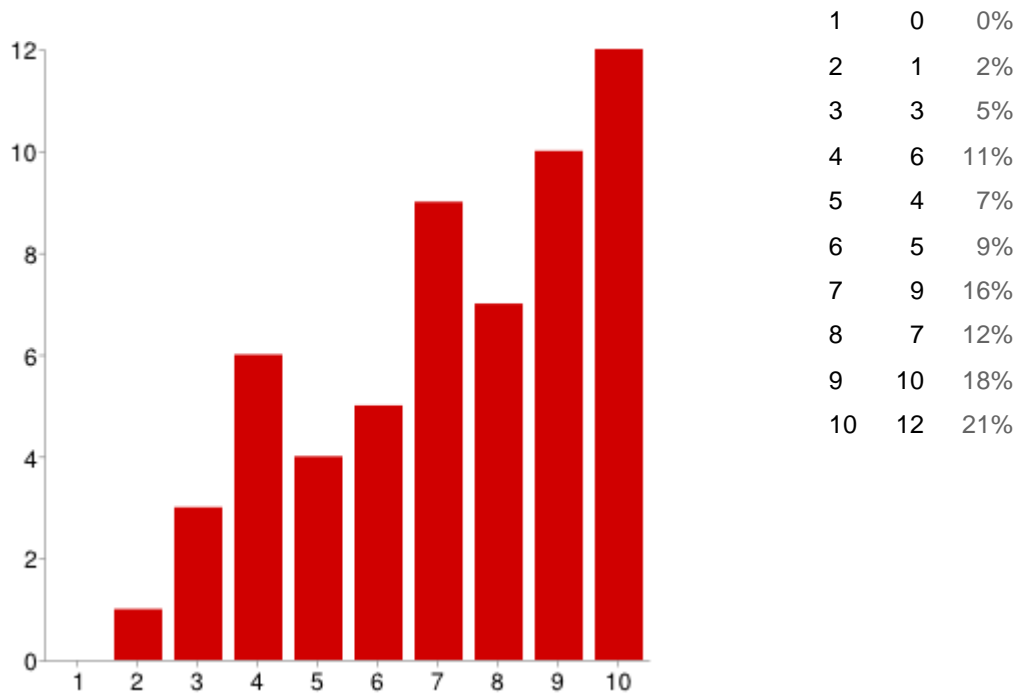
4. The use of 2,4-D resistant corn and soybeans and Dicamba resistant soybeans in proximity of nurseries and vineyards may be problematic.



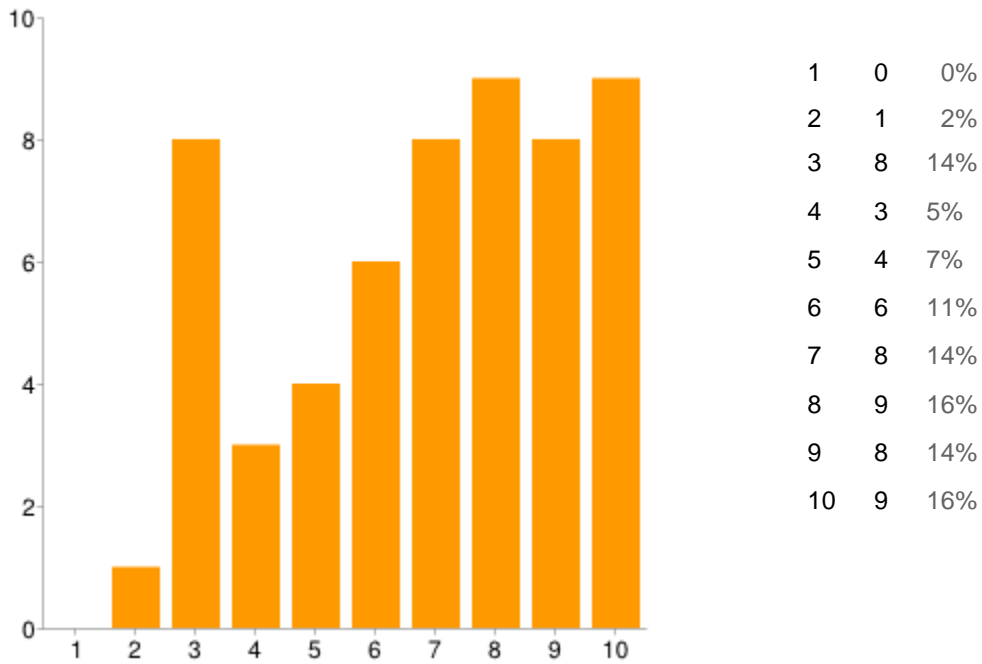
5. Long term utility of Bt crops and grower compliance with resistance management techniques. Emphasize need for grower education on the use of refuge in a bag products.



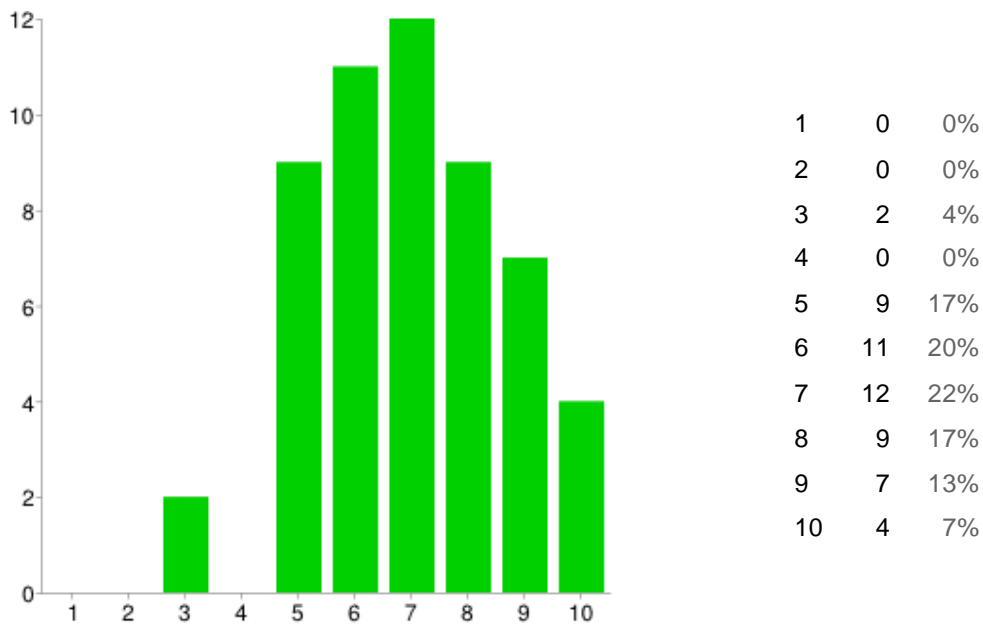
6. Increase educational efforts on invasive species (plants and insects) including detection, management and impacts. Educational efforts need to include public and private sectors and emphasize cultural controls such as avoid planting or replacing old plants/trees with susceptible host plants.



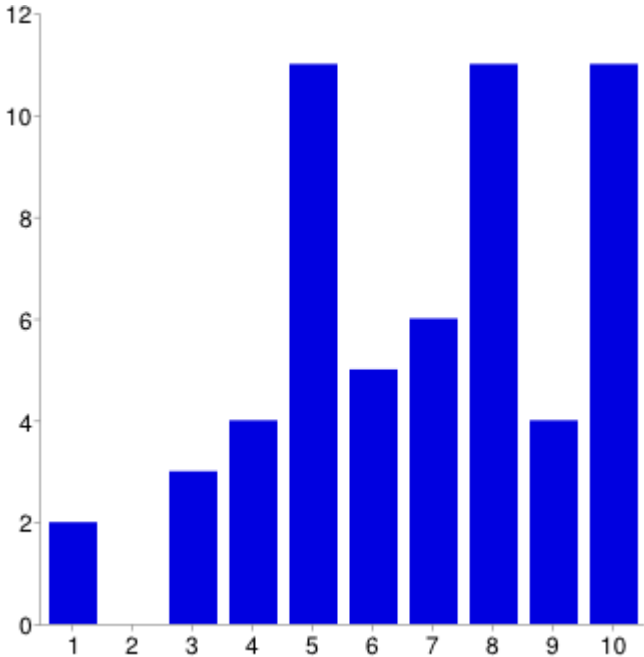
7. Develop IPM educational materials for novice home gardeners.



8. To support ipm-Pipe programs and develop diversified funding to so they do not rely entirely on USDA funds.

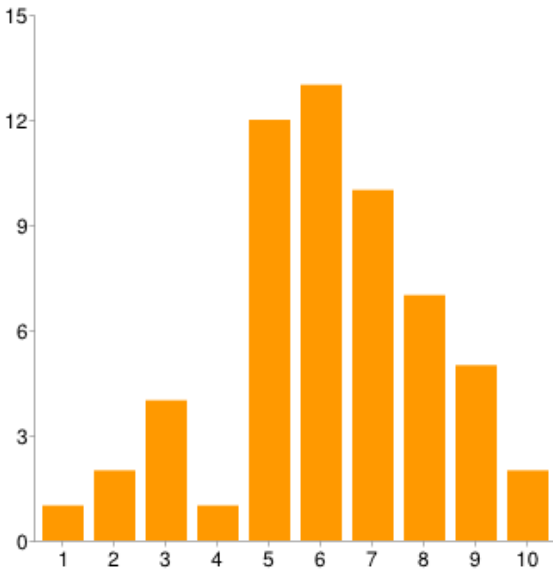


9. Educate crop producers and home gardeners on the proper disposal of outdated and unwanted chemicals and pesticides through the program offered by the KY Department of Agriculture.



1	2	4%
2	0	0%
3	3	5%
4	4	7%
5	11	19%
6	5	9%
7	6	11%
8	11	19%
9	4	7%
10	11	19%

10. Re-emergence of Southern corn rust is of great concern as corn acreage increases especially in areas such as southern Florida. This provides more overwintering and opportunity for it to move northward.



1	1	2%
2	2	4%
3	4	7%
4	1	2%
5	12	21%
6	13	23%
7	10	18%
8	7	12%
9	5	9%
10	2	4%