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Take Crop Scouting To A New Level - ID & Eliminate The Source!

Early season crop scouting goes beyond just simple assessment of what's on the sticky card. Paying closer attention to the big picture when little outbreaks occur can reduce chemical costs and crop losses significantly. All it takes is a willingness to open the eyes and look beyond the cards.



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It's late January, its 10 below zero outside and you've just discovered your Hydrangeas have thrips. How did that happen? Surely, they didn't come in from outside? Blame your sanitation. Most greenhouse owners correctly insist that their employee take part in a scouting program. In most cases, the employees depend heavily upon sticky cards, with an occasional walk through.

By itself, "scouting by card" can detect an emerging population of insects and steps can be taken prior to the insects causing serious damage. This last week, I came across several instances of minor disease and insect issues the owner had not seen. Upon "scouting by the realm," rather than "scouting by

card", we were able to identify the sources of the pest or disease...and it wasn't where the owner thought it would be! I suspect many greenhouse businesses are gearing

up and are so incredibly busy they live by the cards only. So let's review how to learn to use our eyes and tweak a scouting program to gain full benefit.



Early Spring crops such as Hydrangeas, Primulas and Calceolarias can serve as a good indicator of the general level of sanitation in January and February.

e-GRO Alert

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Reporting Speed:

The first question a manager should ask once a disease or insect problem arises is "How fast did we catch it?" Is it one or two white flies? Or did it wind up being caught after a dozen plants became significantly infected? If you are repetitively catching things after they begin to spread, there is something lacking in your scouting program.

Crew Movement:

The instant you see a problem, ask yourself, "where do my crews go from here?" "What is the usual traffic pattern for any worker working in this infected site?" Quite often, you will find infestation nearby along the travelled route of the employees.

Scouting in those areas soon is intensely important.

Find The Source:

Even before spraying, find out where that pathogen or insect originated from! Was infected plants near a vent, a garbage can? Was it a newly planted crop? Was it something grown in that spot that just shipped? This can take time, but it can also be worth it to see where the holes are in your program.

Review Watering Policy:

Especially in the matter of diseases, looking carefully at how and when irrigation occurs that may explain a pattern of spread or a likely source. Once you know how, you can fix why.



It's just one leaf...but this Gerbera is hosting a major infestation for a producer who failed to scout for that escapee seedling under the bench. Sanitation is all about attention to details.

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Garbage Can Policy:

I was chastised early on in my career by our meticulous greenhouse manager for leaving garbage cans in the greenhouse after clean up or pinching. Insects can continue to spread on the tissues and diseases can grow furiously in a closed garbage can. Open the lid just once, and you let out a 100 white flies or 100,000,000 spores. This was demonstrated to me with great embarrassment. Get those cans or boxes of debris out of the greenhouse immediately at the end of the day.

Hanging Basket Policy:

One of the biggest reasons a "scouting program fails is that hanging baskets are

not scouted properly. It is imperative to have a policy of taking the basket down and viewing it from the sides and from the top. Putting out sticky cards does nothing for identifying a huge populations of spider mites or aphids if you don't get up there and look.

Pet Plants:

Never! I know every greenhouse management text book says never have pet plants in the greenhouse. Yet, in 90% of even the most sophisticated greenhouses the presence of a or several pet plants continues. Why is this a problem? Because for some odd reason, folks don't scout those plants and are loath to toss them if they do have in-



Would you have noticed this hose laying on the ground? Notice the debris. If this is a daily occurrence, there's a high probability of disease being spread in an otherwise very clean greenhouse.

sects or mildew. If you must have pet plants the scout them weekly. If you are the owner, just say NO!

The Under-Bench World:

Depending on the greenhouse bench design, the area under your benches may be a significant breeding ground for problems. Not everyone can afford continuous cement floors, but at the same time, no one can afford continuous infestations due to poor sanitation under benches. When was the last time you actually looks under the benches?

Gutters, Drain Ways:

Many greenhouses have drain ways and gutters that help remove excess irrigation

water away from the production area. Take the time to walk the entire drainage way. Look for blockages that allow water to pool, algae filled areas, or worse, large areas of wet weedy ground just outside the greenhouse. If you have algae, things need to change.

Hand Washing Policy:

If you are a grower with crops that take quite a bit of hands-on work, such as pinching mums, enforcing your handwashing policy is essential.

The golden rule is to wash hands before and after a major pinching operation. Getting your employees to wash

their hands four time a day will go a long way towards reducing the spread of disease and insects.

Clipper/Knife Policy:

When you go into a barber or hair stylists business, the combs, clipper heads and scissors are usually in a solution of soap and alcohol to assure you they are clean and won't spread scalp diseases. So too does it matter that clippers, florist scissors and knives need to be cleaned and sterilized several times a day to prevent disease, insects and viral spread. Take the time soon to review your sanitation program in the head house, and the greenhouse.



One leaf hidden in the back of a stock plant can mean disaster for a Coleus crop, especially for a cutting propagator's crop. Two mealy bugs can quickly become a major infestation in warm weather. Get rid of those pet plants!

Hose Wands

Most everyone knows not to let hose wands lay on the greenhouse floor. What surprises me is the number of growers that drop their wands on the floor during watering. The five second rule does not apply! Buy some cheap hangers and craft some wand holders near where you often have to put the hose wand down... never let the wand touch the greenhouse floor.

Plug/Liner Scouting:

I've been at UGA for over 25 years. In that time, I have had to deal with thousands of instances where an outbreak of disease or an insect infes-

tation is blamed on newly arrived plugs. The truth is you don't know. How on earth can you know where the problem started if you don't check the plug trays when they come in? The number of hours and the hundreds of dollars saved scouting plug trays can be huge.

Do it right the first time. Pull and inspect a few plugs from the edges and center of the plug tray and then pay close attention to leafy undersides and roots is significant. It is best to assign one trained person to be the checker. Have them report to you in writing each day.

Take Notes:

If you were to have taken just a few seconds to record "I found white flies on the cuttings from X", or "Spider mites erupted on the Cineraria again in section X this year despite spraying" you'd have a powerful way to identify recurrent issues such as insecticide resistance, bad handling habits, a less than careful supplier, etc. This gives you greater management control and will result in cost savings and a higher quality product.

Go get a cup of coffee and assign someone to determine if your scouting program is "big picture" ready.



Unless you really think about it, this image of a hose laying across a patch of algae is that big of a deal...unless you remember what's living inside that patch. That hose is spreading inoculum all over this section of the greenhouses. What about the hands that pick up and move that hose???