

he infamous Gordon Gekko, played by Michael Douglas in the 1987 movie "Wall Street," said, "The most valuable commodity I know of is information." Understanding that while commercial plant production and financial investments are different industries, the same principles apply — information is the most important factor in making any decision.

The decision to implement a scouting program is one that can weigh heavily on the minds of growers. No matter the location, crops or resources available, it is important for any grower to have a scouting system in place to ensure a successful integrated crop management program.

Because biological control agents (BCAs) are enacted under low thresholds, scouting is the only method that will secure fast and reliable information and set the course to prevent damaging levels of pest populations or control an existing pest infestation.

BCAs work best when their use is carefully planned by understanding the growing operation (cropping systems, rotations, etc.) and its particular pest problems. The better these important parameters are understood, the better the results. Scouting will help deliver the information needed to achieve the most marketable crops.

A successful scouting program will arm growers with key takeaways that can lead to a great crop:

- 1. Information
- 2. Ability to act fast

#### Information

Scouting is the only way for a grower to have an intimate knowledge of their crop and potential disease and pest pressures. Unless you are in the field looking at plants, decisions will be based on speculation and guesswork, which will most likely not lead to great crops. Conversely, accurate, reliable and timely information can be instrumental in delivering consistent, quality crops.

# **Ability to Act Fast**

One of the biggest benefits of having reliable and fast data is the grower has the ability to identify problem areas before disease and pest populations explode and result in irreversible damage to crops. As a result, growers can correct or modify any existing plans for chemical controls and BCAs and adjust them based on the pests or disease present.

Such fast action greatly reduces the potential for extensive crop losses because scouts can detect infestations early and act with precise countermeasures.

You can relate a disease or pest breakout to a fire. Firefighters can respond quickly and use fewer resources to battle the blaze when detected early. However, if left unattended the fire will spread and the result can be severe collateral damage and sometimes a total loss.

There are several key factors to consider during the planning stages once the grower decides a scouting program can be implemented.

### **Establish the Proper Protocol**

The grower must have a well-thought-out plan in place for a scouting program to be successful. It starts by finding the right person for the job. A good scout must be motivated, meticulous and pay attention to detail.

Scouts must also have an understanding of the crops they will scout as well as what pests and diseases are common to that environment and crop. As the grower, it is important to designate specific responsibilities to the scout or scouting team. Duplicated efforts can lead to wasted time and money.

Scouts must also have the ability to keep detailed records and highlight problematic areas that need attention.

It is recommended to start small and keep things simple and manageable when the grower or scouting team is new to the process. It is far easier to expand the operation over time and assign more responsibilities rather than having re-check the crops.

It is clear that scouting is essential to the success of any growing operation and plays a pivotal role in an integrated crop management program.

# What Do Scouts Need to Know?

For scouts to be successful they must have an understanding of what to look for and the environment in which they are operating. An intimate knowledge of pests and their behavior, as well as diseases, is essential to effective scouting. It is critical they can identify the signs and symptoms of pests and diseases on plants. Not all insects or mites are bad for crops and interpreting the difference between them should not be overlooked.

While pests and diseases are the focal points of the scouting operation, it is very important to know what abiotic factors are in play in the field or greenhouse. Outside influences such as water and sunlight, among others, play a role in the overall health of a plant and the obstacles each plant must overcome to reach its full potential.

#### **Tools of the Trade**

Before the scout enters the field, they must have

the right tools for the job. The scout's equipment checklist is not complicated, but it is important to every aspect of the job. Some of the tools a scout will need to check every detail on the plant are:

- 1. A 10x or 20x hand magnifying lens to carefully examine leaves (including the underside)
  - 2. Sample bottles
  - 3. Waterproof pens
- 4. A method for marking hot spots such as colorcoded flags
- 5. A standard form or method for recording findings
  - 6. Sticky notes
- 7. A digital camera with macro setting is not essential but can be very helpful

## Which Scout is Right for You?

Growers can pursue two avenues when looking to implement their scouting program. Each has its own unique set of advantages and disadvantages. It is important for growers to understand the differences



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between the two and decide which would work best for their operation. The question growers must ask themselves is, "Do I want to handle this internally or outsource the initiative to an external scout?"

# **Internal Scouting**

Keeping the task of scouting internal can be

beneficial to a grower because that person is likely already familiar with the greenhouse or nursery and understands its operational practices as well as the plants and how they appear in the right environment. An internal scout is often only responsible for a particular nursery or greenhouse and does not carry the risk of bringing in pests or pathogens from other facilities and jobs.

Because an internal scout is already part of the operation, there is no need to add an additional expense of an outside agency and there is an intrinsic level of confidentiality.

The potential disadvantages of maintaining the scouting operation inhouse are both task oriented and financial. First, as with most operations, an internal scout is likely to be pulled in different directions and being redirected to other work. Also, existing job responsibilities can limit the ability to acquire the necessary skills and understanding required to be a proficient scout.

# **External Scouting**

Delegating the scouting job to an outside company can also provide some significant benefits if a grower decides this is the best course of action for his or her situation. Professionally trained, full-time scouts tend to have a higher skill level and offer specialized services. Their network of resources and diagnostic resources will often be greater than that of an internal operation.

An external scout can be cost effective because you are only paying for the time the scout spends on your job and this task becomes one less worry for any grower.

However, there is a bit of a learning curve when contracting to an external scouting program. First, the scout must learn about the grower's plant production system, potentially new plant species and what each plant looks like in its healthy state.

As mentioned previously, outside scouts are not dedicated to solely one grower and as a result, there is a risk of cross contamination of pests or pathogens from outside facilities. It is imperative for growers when considering an external scout to do extensive due diligence and ask for references during their research phase.

# Is Scouting Right for You?

It is clear that scouting is essential to the success of any growing operation and plays a pivotal role in an integrated crop management program. No matter if a grower decides to handle the operation internally or externally, what is important is that they scout. The results will be realized

when they see quality crops that sell well and grow revenue.

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