

If your advisor is telling you "Don't do IPM unless your customers are demanding it"..... it may be time to change your advisor!

Put the 'M' back in IPM...and get the most out of your crop

Although biological control agents are delivered to your farm in a bottle - Integrated Pest Management (IPM) does not come out of a bottle. The most important component of an IPM programme is the 'M' in IPM. It's the 'Manager' and the management of the programme that makes it work. Mmmm?

Keeping the customer happy

Kakasaheb Jagtap is general manager of Bigot Flowers Kenya Ltd, where he manages 53 hectares of roses for the French parent company SAS Bigot Fleurs, based in Allonnes (Sarthe), France. Whilst Bigot Flowers has been diligently complying with the mountainous audits required from top end companies, they have discovered a new truth about how to make rose growing more profitable. Already a Fairtrade compliant farm, Bigot took up the challenges posed three years ago by the Swiss COOP and German Rewe supermarket chains – to reduce chemical pesticide inputs. Bending over backwards for customers is part of the game we all play. But sometimes these contortions can reveal a new view of things! The customer required only one hectare of the bio-intensive crop in a 3-year trial supported by Bigot's bio-control supplier, Real IPM Kenya Ltd. Jagtap and his team were obliged as part of this supermarket circus act – to record the costs, yields and benefits of implementing a full-blown IPM programme. They followed the advice of their technical advisors and implemented a bio-intensive IPM programme. They diligently recorded the input costs and the resulting yield and quality. And to their surprise,



the figures revealed, that reducing chemical pesticides actually reduced the cost of the crop protection programme, and increased yield and quality too. Unexpected benefits. And the customer was also happy, because he was right.

Patience and persistence

It was a long journey that required persistence and patience. The customer imposed the persistence and even the costs were under-written by the customer to reduce the likelihood of a U turn. But the patience was provided by the manager because of the trust he placed in his advisor, and his willingness to learn more about how biological controls work and how they should be applied to effectively interfere with the life cycles of pests and diseases. As Jagtap explains, it takes 4- 6 months of persistence before you begin to realize the full benefits on insect pest control from a bio-intensive IPM programme. Prophylactic programmes seem expensive at first but it is an investment in the

future health and productivity of the plants.

Important savings

Bigot Flowers apply Real Trichoderma to the soil once per week and will spray it in the canopy every week for leaf diseases. Disease spores are in the crop every week – so the antagonistic biological controls also have to be 'there' every week. It's simple. Bigot Flowers uses the SCARAB programme across the whole farm to keep tabs on pests and disease outbreaks. This is a GPS system that produces rapidly updated contour maps of problems in every greenhouse. "We have very little downy mildew anymore except for a few easy-to-treat spots, which he will clean up with knapsack sprays of a suitable fungicide," he reflects - "When I hear my neighbours complaining about downy mildew, I remember how bad it can be!" He added, "The quality of my foliage is great and my bud size is larger, stems are longer. I put this down to the improved leaf quality."

by Louise Labuschagne



The Black Tulips Flowers Group has been advised by an independent consultant, Avinash Mokate for more than 5 years.

Nowadays he can see the benefits of his change in direction. The roots are more active, there are more white roots and they grow down deeper. This has allowed Jagtap to only apply irrigation twice per week, rather than every day. It has saved 20% of his irrigation volumes and costs.

Soil or hydroponics?

Hydroponics is an expensive investment, earning input suppliers an extra \$4/meter square to set up. Bigot Flowers is growing 90% of their crop in the soil and Jagtap is adamant that he will continue to grow his crops in the soil because they are healthier in the soil.

That is another interesting turnaround as leading input suppliers in Kenya have described hydroponics as 'saving the industry' because it allows 'better control' of water and fertiliser. Well meant, expensive, advice, but seems not entirely true in these circumstances. Jagtap applies 420 cubic meters of manure to his soils per hectare, every few years and mulches the crop with chopped packhouse waste on a regular basis. This allows the biological control agents, which he applies every week to the soil, to have additional organic matter to feed on. Bigot Flowers are using less inorganic fertiliser because of the applications of organic matter and vermi-liquid

fertiliser, which he also makes on the farm. Jagtap estimates his costs have gone down from \$900 to \$700 per hectare per month. These savings, coupled with increased yield and quality make IPM more than just 'affordable' – it's essential.

No looking back

Levels of crown gall are insignificant – in spite of applying packhouse waste to the crops – because he has a rich soil full of organic matter and an intensive Trichoderma programme. How many growers throw away their packhouse waste because they are afraid

Kakasaheb Jagtap, general manager of Bigot Flowers (Kenya) Ltd.



of crown gall? More well-meant advice, but the advisors failed to appreciate the role of organic matter and a real bio-intensive programme every week. This change happened gradually and followed real investments in biology rather than technology.

When a good manager decides to get on with it – that's when IPM starts to work. IPM is not in a bottle. Bigot is now rolling out the Real IPM Holistic Programme on the entire Kenyan farm with the support of their Real IPM consultant, Peter Muriungi. No looking back. And he is not on his own. There are many leading Kenyan growers on the same road.

Black Tulips

The Black Tulips Flowers Group has been advised by an independent consultant, Avinash Mokate for more than 5 years. Avinash is in close communication with Sam Ngugi, Technical manager of Real IPM Kenya, who manages a team of 8, BASIS-qualified field advisors who support decision making of flower growers in Kenya. It is a well-qualified team that reinforces good decision-making by sharing experiences and practices. Farm managers gradually build up their own expertise with the support of these advisors – if they are given the budget and freedom to operate and implement bio-intensive programmes.

Black Tulips are the largest independent floral company in the Middle East, supplying cut flowers, foliage and plants. The Kenyan rose farms now total about 100 hectares and are headed up by managing director Mohan Choudhery who has over 15 year experience in rose production on the Equator. Black Tulips also use the SCARAB system to evaluate their crop protection programmes. The advisor and the MD can 'see' what is happening in a crop – even if they are on the other side of the world.

Buy-in from the top down

It is not often that the MD of a rose farm joins in a technical IPM workshop, but that's what Mohan



did recently, alongside his production team. Avinash Mokate realised that without the full backing of the MD – it would be more difficult for IPM to progress at the speed it deserved. He invited the MD to join in the IPM workshop to better understand the IPM crop protection programme and application strategies.

Financial budgets and company strategies are the domain of the managing directors of this world – not much is really delegated. So IPM is more complicated than just ‘something in a bottle’. It’s the way a company is directed and the way advisors influence the direction of the company.

Production manager at their Black Petals farm in Limuru, Nirzar Jundre, has been at the front end with the IPM programme development for Black Tulip Group. He has recorded the same benefits as Bigor Flowers – better quality and yield, less pests and diseases. The effects must be ‘real’ because the MD is also extolling the cost benefits of the bio-intensive programme. Black Tulips have the ambition to grow organic roses one day. Perhaps they have the right advisor to help them with this transition.

Get ready

There are so many successful IPM farms now in Kenya and significant progress in the reduction of pesticide residues - that low pesticide residues could quickly become a minimum requirement in any high quality market in the future.

It takes time to build up this management expertise - don't leave it too late to develop these skills. All of the skills needed to implement successful IPM programmes are simple Good Agricultural Practice skills - attention to detail, intelligent decision-making and good observational ability. Good flowers need good managers and advisors. IPM is easy if you get good advice and you have a capable management team. For the farm to have a good IPM programme, the team involved needs to have a better understanding of the life cycles of the pests and diseases and be competent enough to anticipate problems, devise and implement a preventative programme and apply crop protection agents (chemical and biological) correctly to optimize control.

Putting on a lot of chemicals will not solve crop protection problems - global issues of resistance and unwanted residues will prevent this being either a medium or long-term solution. What does your advisor say about this? Put the ‘M’ back in IPM...and get the most out of your crop. |||

by William Armellini

Low tech computer repair

Like almost everyone we have several computers in our home. In my case one for the wife, one for business and one old spare. It seems that all three decided they were tired and did not want to work properly any longer. Now I am not a computer technician, but I am handy and not afraid so I wondered what was going on with all three.

The two older ones kept shutting off for no apparent reason, and the fans in my newer and more expensive work computer were working overtime and never shutting off. I suspected they were all struggling to get proper power, so what to do?

I was about to begin shopping for new ones since these are between 5-10 years old and obviously there has been a lot of improved technology and hardware introduced over that amount of time. The older two are running Windows XP and mine Window 7 so now that Windows 10 is out upgrading seemed the logical thing to do.

But wait, these machines capabilities are fine for surfing the web and doing basic computer work so there must be a better solutions than spending a ton of cash on new machines.

Ok here was my solution: I disconnected all of the many wires and took the oldest machine into my workshop where I opened it up.(removed the side door) They are not as scary inside as one might imagine, just of bunch separate components wired together by connectors. But you need not touch any of them.

If you have an air compressor, (doesn't everyone?) fire it up. If you do not have one, go to an office/computer store and buy a can or two of compressed air.

Now stand back, cover your nose and blow all of the dust out of the inside of your computer. You will be amazed at the amount of dust and other unidentifiable things that will fly out of there. Keep blowing over all the components and fans until nothing is coming out. Replace the door and return your machine to its proper place, plug all the wires back in (the proper holes) and fire it up.

Assuming your computer was acting like mine, fans running constantly, or shutting off unexpectedly then I suggest this will cure most of these problems. I did end up needing a new power supply in one computer which I replaced. But this simple blowing action fixed the other two and they now behave as designed and all it cost me was air and time.

Basically, the dust that gets into your computer begins to build up on the electrical contacts and they start generating heat. This in turn makes your computer have to work harder and harder to keep cool and thus fans are running or it gets too hot and shuts down.

Since most computers, like yours and mine, are sitting on the floor under a desk where they are bathing in dust all 24/7 and the fans meant to cool the machine are sucking it all in. This solution will not cure bad software or faulty devices but it is likely to solve these temperature related issues.

Stay cool Miami is hot! Good luck!

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