

However, as this is not always the case the plants should be graded prior to dispatch. It is not a matter of grading out the order and discarding the rest but more a case of grading to sizes and shapes with reference to the requirements of the specific customer. If a fair percentage are heading to the scrap heap then your procedures at an earlier stage need review.

Any crusting, algae, or weeds in the tubes should be removed, the labels checked, and the plants watered ready to go to the customer. Any dead leaves should be removed and errant branches trimmed so that the plant looks “just right”. Ideally there should still be some fertiliser in the mix so that the plants will shoot away as soon as they are potted up. It is no good if your plants look great but fall over soon after the customer receives them.

Well, that ends the “walk through Larkman Nurseries”. I set out thinking that this would be a short paper that was both easy to write and easy to deliver. I soon found myself running out to well in excess of ten pages, and still only half way through. It seems that the basics of running a propagation business are quite extensive.

There is one final word of advice: you only have one life so enjoy it. Your business is there to help and not hinder this objective.

Staying Alive and Using Potting Mix

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It's amazing what a flamboyant headline can do. I titled my presentation “Staying Alive” after reading the headline “Potting Mix Killer Fear”. Both are in some way a misrepresentation of the facts, while neither is factually wrong. The newspaper headline talks about a death where potting mix is implicated. If you read the copy it is not what you may be first lead to believe. Likewise the title of my paper has led some to believe that there is an immediate life threatening risk every time we use potting media. That is certainly not the case.

It is a case of illogical thinking like “have you stopped beating your wife”. No matter how you answer you will be wrong. The questioner will be able to manipulate the situation to draw a conclusion that suits his/her purpose. It is alarmist, and so useful to attract peoples attention. But it does not give a true or complete story. Cynics here will agree with the old journalist adage, “Never let the truth get in the way of a good story”.

To get some clarity we need to cut to the facts. So here is the bottom line message of my paper. Potting media, composts, and other organic compounds are a potential health risk. You should examine and, if needed, change the way these products are handled in your nursery. These changes will result in nursery workers having a reduced risk of disease. So let's get back to the perception side of what is happening. Here I would like to talk about something that has nothing to do with our industry. It is a stomach bug called *Cryptosporidium parvum*. The bug causes diarrhea, and is spread in the main by body to body contact. It is a notifiable disease.

There has been a recent outbreak in NSW with more than 200 cases reported in Western Sydney. It is not normally considered life threatening, but as you can imagine there is somewhat of a discomfort. The Health Department has been checking to see if they can find the source of the infection.

Four of the 200 people had recently visited a swimming pool, which is not unusual seeing it was summer when the outbreak occurred. The Health Department undertook tests and checked overseas data which showed it was possible for the bug to survive in chlorinated water. Note that there was not one Australian case where transmission was certain from a swimming pool. As a result most of the NSW swimming pools were closed whilst the water was replaced and the place disinfected. In Western Sydney this took a week.

The perception is now that swimming pools are to blame for the spread of the disease. The facts are that for at least 98% of the Sydneysiders affected this is not so. Swimming pools make most of their income in 4 months over summer. To close for a week over this period is equivalent to stopping the income in a nursery for 3 weeks, and they had to pay for the disinfestation as well.

The Wallace Lake oyster farmers of the central coast of NSW can also give us a lesson in how perception can lead to devastation. The death from food poisoning after eating an oyster of an elderly and infirm gentleman was regrettable. The oyster farmers involved followed the safety guidelines as set out by the Environmental Protection Authority. They did not skimp on safety and ran the oysters through a decontamination process. The infection was mild and in 99.9% of cases was not life threatening. Oyster sales vanished after the press got hold of the story.

As a result many of the farmers are now bankrupt and the butt of every shellfish joke. Honest and dedicated farmers who would not intentionally put out a bad product have been devastated for doing all the right things.

The lesson here is that public perception will lead authorities and the buying public to come to a conclusion that is essentially not a true reflection of the facts.

There is more risk of getting Cryptosporidiosis from exchanging money than swimming, and eating Wallace Lake oysters is more likely to increase your libido than knock you off. Likewise the risk of getting terminally ill after using potting media is far less than being struck by lightning.

The garden industry has yet to come under any concerted media attack, but we should not be complacent. We should have in place a way to manage this situation if it arises.

The best approach is to be proactive. We as an industry need to be honest about the risks that are taken when people use potting media. We need to clarify those risks and to identify the safest way to use the potting media. We need to ensure that we set a good example and lead the way in safe handling of this basic product to our industry.

We also need to manage the (mis)information that is being distributed to ensure that the public is not lead to the conclusion that to garden is an unsafe and hazardous activity. If this is allowed to occur unchallenged nursery operators might end up in a similar situation to the Wallace Lake oyster farmers.

Being honest about the risks is what lead the manufacturers of bagged potting media to develop a label. They wanted the label to be clear, simple to read and not give a false impression. It was also essential that this label was national. Most manufacturers trade interstate and having a variety of labels would be confusing.

If the industry association had not moved quickly and efficiently on this issue then we could have had vastly different requirements from the respective state departments of health, some of whom entertained the idea of banning bagged potting media entirely. Getting all states to agree on anything is no mean feat.

The result was obtained by subtle lobbying and the backup from the industry funded research.

Being honest about the risks is also why we now have a Material Safety Data Sheet (MSDS) for potting media, composts, and other organic materials. You may not be aware that there is a MSDS for perlite and vermiculite as well. The MSDS clarifies the risk and gives ways in which you the propagator can use these products safely.

So the bottom line is we need to change. Managing the change is what is important here, It has been said that when faced with adversity people generally follow a four step process.

- 1) The first step is disbelief. “No, potting mix cannot be harmful in anyway. I have been using it for 20 years and I’m not sick. They could never enforce it anyway”
- 2) Next comes anger. “Why is the Nursery Industry Association (NIAA) doing this to me, can’t they just leave me also to get on with my job?” or “It’s another case of Government ruining our life.”
- 3) After anger we get acceptance. “Oh well I suppose we are all in the same boat.” “It is going to happen whether I like it or not so we may as well get used to the idea.”
- 4) Only after these first three steps do we get people accepting that they must change.

Propagators can lead the change process. We can see that in the end there are benefits from having a safe work environment. We can move our workmates, employers, employees through the change process quickly.

We need to develop new handling procedures for potting mix and other organic compounds. This for some activities will mean the use of gloves, face masks, and goggles. But it is not necessary and a gross over reaction to think we all need to walk around in space suits just to work in a nursery. The key here is risk management.

Risk management is looking at conforming to the MSDS, that is having a safe workplace as well as being comfortable. It is about the management and workers in a nursery sitting down together to find ways to manage the risk. It is also about sharing good ideas with other propagators so that their health is also protected. Good ideas can include shields and covers on potting machines, water races, extractor fans, etc.

Already there are changes being made to potting machinery. Comet, a Queensland-based manufacturer of possibly the most popular potting machine have now installed a shield system and are working on an extraction system. Using this the risk of bioaerosols and dust is reduced considerably. The improvements can be retrofitted into existing setups.

We live in a country where litigation levels are increasing and approaching the rate of the U.S.A. When lawyers tout openly for workers compensation business, and where some aggrieved individuals see an opportunity to gain easy money, we will suffer the risk of being sued. To reduce that risk it will take vigilance and attention to detail. You will need to be aware of the risks and inform your staff to ensure that they follow the safety requirements.

In reality this is not a potting-mix issue. It is an Occupational Health & Safety (OH&S) issue that is being spearheaded by potting mix. We need to face the fact that there are many substances that are in our nurseries which are a potential health risk, and we need to closely manage the ways in which these are handled.

It is imperative that you are able to demonstrate, in a court if necessary, that the staff who handle these have been trained in their use and are competent to do so. Many nurseries also have operating procedures that could be altered to improve the health and safety of the work force. Again, this is about communicating with staff and management to ensure the best outcome.

Let's not leave out the buying public from changing their practices when using potting media or other organic compounds. We can be the source of reasoned information, whilst escaping being the focal point of the anger. It makes it harder for the public to form a false impression when the industry is at the forefront of factual and reasoned information and is prepared to make changes themselves.

It is incumbent on us to keep gardeners up to date with developments, so long as the facts of your information are correct. There is an opportunity for professional garden centres to show leadership here. Stonewalling and ignoring questions will only lead to misconceptions, mistrust, and fear created by those with an agenda to alarm. To assist, NIAA and AHC are putting together a three-fold brochure aimed at the gardening public which will be available shortly.

This is not the ideal forum to go into the new ways of handling potting media. They will differ according to the workplace layout and assessed risk. There are details of diseases to consider and the MSDS to be explained.

The nursery industry association has put together a short workshop on this and advise all of the industry to attend as soon as practical. The workshop will examine current information available and look at options that could be considered for dealing with this aspect of OH&S.

There are four things that you can do TODAY to ensure that potting media in your nursery is handled safely.

- 1) Decide to only purchase and sell potting media, bagged or bulk, that has the NIAA approved label attached. This label should also be accompanied by an MSDS.
- 2) Enroll to attend the Safe handling course as quickly as possible. It should be available within a few weeks. Also send your staff along.
- 3) Examine the work practices at your nursery, in conjunction with staff, owners, and others. Seek to reduce the risk of disease by conforming to the MSDS.
- 4) Advise your customers of the issue by:
 - Offering a MSDS when selling all potting media, composts, and other organic material;
 - Providing the three-fold pamphlet when it is available.

New information will be made available through Australian Nursery Manager and sent to State Associations.