



Biosecurity

SASA recognises effective biosecurity as one of the most important foundations necessary to ensure the long-term prosperity of the South African sugar industry. Historically, there have been instances where sugarcane varieties have succumbed to certain pest or disease, resulting in millions of rands in lost income. Further costs have been incurred in replacing them with more resistant varieties. In today's economic climate the industry can ill-afford such disasters. Unfortunately though, this possibility is facing us once again with some of the industry's stalwart varieties like NCo376, N12 and N25 coming under enormous pressure from diseases. Drastic and urgent action is required if these varieties are to survive much longer.

SUGARCANE PRODUCTION IS AN EXTENSIVE MONOCULTURE AND THIS TYPE OF ENVIRONMENT IS HIGHLY CONDUCTIVE TO THE ESTABLISHMENT AND SPREAD OF PESTS AND DISEASES. AS A RESULT, WE ARE LIKELY TO CONTINUALLY FACE NEW CHALLENGES THAT NEED TO BE MANAGED PROACTIVELY, BEFORE THESE THREATS ESTABLISH THEMSELVES AND CAUSE MAJOR YIELD LOSSES. THE VIEW THAT VARIETIES WILL PROVIDE THE ULTIMATE SOLUTION ALSO NEEDS TO BE TEMPERED WITH THE FACT THAT PEST AND DISEASE PRESSURE STILL NEEDS TO BE MANAGED – EVEN RESISTANT VARIETIES WILL SUCCUMB WHEN EXPOSED TO EXCESSIVE DISEASE OR PEST PRESSURE.

The solution to the problem requires a fresh look at the principles of biosecurity and a change in attitude of the entire industry. A common view of biosecurity is one where the focus is on keeping new pests and diseases out of a country. Whilst this is important, and there are very serious threats beyond our borders, this view detracts from the very serious problems there are in containing existing threats *within* our borders. For example, eldana borer is spreading rapidly into the high-altitude areas of our industry; ratoon stunting disease is also now found to be a serious problem in the irrigated north and mosaic has also spread

from its original home at high altitude to as far north as the Lowveld.

The reality is that all of the major pests and diseases of sugarcane in South Africa can be found in all parts of the industry. The recent rapid spread of sugarcane thrips and rust throughout our industry further emphasises the need for an industry-wide approach to biosecurity. Tackling problems at mill or even a regional level is simply not enough. Co-operation across our borders is also vitally important to keep new threats at bay and to contain them at their source. Furthermore, many SADC sugar

industries are based heavily on SASRI varieties, and this places our industry at risk if a problem develops with any one of them. Recent efforts, particularly by SASRI, have been directed at securing our borders and building relationships with our SADC partners in order to create a regional awareness of biosecurity risks.

The idea that there is a single solution to biosecurity problems is simply not true. In every instance, the control of a particular pest or disease is affected by a combination of control factors. This gives rise to the concept of an integrated approach to pest and disease control where agronomic, chemical and biological control methods are all used appropriately to afford lasting and environmentally sustainable control. Unfortunately this type of approach is not often considered as it is far easier and more convenient to focus on a particular control method that yields the most rapid results.

Exposure to risk can be reduced even further if growers plant a number of varieties on their farms. Traditionally growers tend to favour one or two stock varieties for their farms, but this increases the risk of disastrous yield losses should one of these varieties suddenly succumb to a pest or disease.

If we are to get to the place where biosecurity risks are contained and managed, growers will also need to take individual responsibility and implement best management practices. Too much reliance is placed on Local Pest, Disease and Variety Control Committees (LPD&VCCs) to identify and monitor the numerous biosecurity problems on growers' farms. Inspection teams simply cannot get to every field in a mill area and growers need to supplement LPD&VCC surveys by carrying out their own scouting exercises as well as implementing remedial measures such as roguing or even premature plough-out before being asked to do so by the LPD&VCC.

Recent dry seasons have again highlighted the importance of reliable sources of sufficient clean seedcane. As the first step towards achieving effective control of pests and diseases, nurseries of hot water treated

disease-free seedcane need to be established on every farm in the industry. Unfortunately, this is once again an area where there is room for significant improvement.

The good news is that the South African sugar industry has everything it needs to protect it from biosecurity threats. Excellent research carried out at SASRI combined with an efficient extension service, working in collaboration with LPD&VCCs throughout the industry form the basis of an extremely cost-effective insurance policy against the potential damage caused by pests and diseases. However, the challenge remains that knowledge without implementation serves no purpose and it will take total involvement and commitment by all members of the industry if total peace of mind is to be achieved. 



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- fire carts
- custom-built trailers
- sugar cane bolsters
- general steel work
- truck bodies
- timber bolsters
- agricultural trailers
- cane/timber rigid draw bar combination



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