

## **High-quality silage can benefit the entire agricultural value chain**

Santam Agriculture is a dedicated business unit within the Santam family, with agricultural business brokers and the farming community as its primary focus. As a dedicated partner in agriculture, one of Santam Agriculture's goals is to guarantee both stability and sustainability in all agricultural practices.

Silage is an important part of a producer's business as it enhances effectiveness and drives profitability. Ultimately, the goal is to increase production by enhancing feed quality with fewer input costs and minimal impact on the environment.

The Santam Agriculture National Silage Competition will be presented for the seventh time in 2020. Santam Agriculture has been the name sponsor of this competition since its inception and its aim is to spearhead growth and sustainability throughout the agricultural sector.

The 2019 competition was especially tough and boasted a record number of entries with the awarded points surpassing the previous year's achievements. Westend Landgoed was once again crowned the silage king and grabbed first place in the maize silage category. Hurwitz Farming reigned supreme in the feed sorghum category and De Draay secured first place in the oats silage category.

### **Benefiting the entire value chain**

Gerhard Diedericks, head of Santam Agriculture, says all the specialists who have been involved in the competition over the years, such as silage experts John Bax, Prof Robin Meeske and Richardt Venter, helped to determine the efficiency levels of various factors such as compaction and the chop length of feed particles.

"If we improve the approximately nine million tons of silage made annually by only 3%, we can fill farmers' pockets with nearly R130 million in increased milk and meat production without increasing production costs. This competition benefits the entire agricultural value chain by increasing farmers' sales and by unlocking value for brokers.

"It was an easy decision for us to take on the role of main sponsor of the Santam Agriculture National Silage Competition. We support our clients through key areas such as risk management and help them to realise the importance of silage in various production processes, thereby helping them to increase the quality and nutritional value of their silage and broaden their technical skillset," says Diedericks.

The competition generates useful data that is well received by participating companies, farmers and academic and research institutions. It is scientifically presented, follows an internationally accepted protocol and is specifically aimed at the commercial farming sector.

### **Westend Landgoed**

Werner le Roux, manager of Westend Landgoed, entered the 2019 competition and finished with a winning score of 89,90 points – 7,9 points higher than Westend's winning total of 82 in 2018. The winning bunker was entered by Kemin Industries and 2019 also marked the third consecutive year that Westend Landgoed walked away as the overall winner.

Hanno Lombard, owner of Westend Landgoed, says the competition adds a great deal of value to the agricultural industry, seeing as quality silage-making is a critical component of any livestock farming enterprise. "We were pleasantly surprised to once again be crowned the overall winner in 2019, as that was a particularly challenging year for us. All of our maize harvested for silage-making suffered hail damage, but we still managed to come out on top."

### **Hurwitz Farming**

Jarren Hurwitz of Hurwitz Farming won in the feed sorghum category with a silo bag entered by Budissa Agroserve.

According to Jarren, the importance of the Santam Agriculture National Silage Competition lies in its focus on improving silage production practices. "Silage is a critical feed source in animal production and is more scientific than simply chopping up and trampling plants. By improving and widening our silage production industry, we can achieve higher profitability and sustainability. This allows us to increase farm-based production, ultimately improving the country's food security," Jarren explains.

### **Definition of high-quality silage**

Jarren says quality silage is usually made when all the critical factors are taken into consideration. "Firstly, you have to make sure the cutting stage is correct in terms of dry matter and moisture levels. I prefer drier silage of around 40 to 45% dry matter. Furthermore, having high-quality cutting and transport equipment ensure that inoculants, chop lengths, corn cracking etc. are accurately utilised and that the chopped material gets transported quickly and efficiently.

"The next, and possibly the most critical step to ensure high-quality silage, is the actual ensiling process, which I believe is best performed in silo bags because it rapidly puts the chopped material in an anaerobic state, with the lowest possible chances of contamination. There is no better tool to de-risk the process of successful ensiling than silo bags."

Jarren considers silage to be of high quality when the percentage of dry matter is at his preferred levels, the material has been processed fully and consistently by the chopper, the pH of the silage is in the correct range, and the various acid levels are at the correct levels. "This indicates effective preservation where there are low levels of micro-organisms present in the silage in the form of yeast, mould and mycotoxins.

"A low silage temperature is also critical, which again is best achieved in silo bags because of the rapid eradication of oxygen and environmental micro-organisms that proliferate and erode energy and feed value," he adds.

### **Lessons learned**

Jarren says during each year's competition they are able to compare their silage samples against all silage entries in the sorghum category, so as to evaluate the standard of entries and to pinpoint how they can improve their own silage. "Each season presents its own challenges, so broadening one's overall knowledge with scientific data and experience can improve future silage-making techniques.

"We use silage extensively in our beef feedlot rations and use it as critical winter supplement feed for our breeding stud and commercial cattle. It is a critical item in our feed bank and fodder flow systems," he explains.

Jarren adds that the competition has taught them a lot over the years and that it has significantly added to their skill. "The Santam Agriculture National Silage Competition has certainly played a role in helping us to make high-quality silage, both for our own consumption on our farm as well as for customers through our contracting division," he concludes.

### **De Draay**

Awie Erasmus of De Draay won in the oats silage category with a bunker entered by Meadow Feeds Paarl. According to him, the ensiling process is vital and requires strict adherence to the correct processes to ensure minimum spoilage. The correct chopping length of the plant should also be adhered to and rapid transport of the silage to the bunker is required post-harvest.

"One of the most crucial elements in ensuring high-quality silage is mastering silage compaction. The better the compaction, the better the quality. The silage bunker must be sealed airtight to eliminate the chances of oxygen spoiling your roughage," he explains.

### **Importance of the competition**

According to Awie, the goal of the competition is to critically re-evaluate different aspects of the silage-making process. “Different components of the silage-making process are compared, thereby allowing for correction, which can benefit the next season’s silage.

“After our evaluation, we used the information obtained from our own results to adapt our rations. Our animals are now getting all the nutrition they need. It also helped us to farm more cost-effectively, which makes us more competitive and more sustainable,” he adds.

### **How important is silage?**

Awie adds that high-quality silage is one of the most important feed sources in the dairy farming industry. “If all the correct processes are adhered to, you can get high-energy roughage at a relatively low price. Raising heifers can be costly, which is why we rely on cost-effective products to keep our expenses manageable.

“By producing and storing high-quality silage in bunkers, you can effectively minimise the risk of later having to buy in more feed during drier seasons, which has a direct impact on the profitability of your farm,” he concludes.

### **Risks and short-term insurance**

According to Santam Agriculture, all the equipment used in the making of silage such as tractors, silage rakes, trailers, wheel loaders, silage cutters and balers can be insured. Sealing of the silage is one of the critical parts of the silage-making process. As such, reliable and cost-effective plastic or silo bags is something farmers can invest in and which can also be insured. Remember that silage bunkers also require liability coverage or accident insurance, as they are quite dangerous to work on.

For more information and to enter the 2020 competition, email [deidre@plaasmedia.co.za](mailto:deidre@plaasmedia.co.za). Entries for winter grains have already closed and entries for summer grains will be accepted until 15 May. For more information on agricultural insurance, phone Santam Agriculture on 086 024 7400 or visit [www.santam.co.za](http://www.santam.co.za).