June
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MIDLANDS NORTH EXTENSION MATTERS

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Update - Moth Trap Data

There are currently three moth traps in the Midlands North region and one in the Midlands South, Eston area.
The Midlands North traps are located in the Table Mountain, New Hanover and Mt Elias areas.

The principle reason for having these traps in our cane growing areas, is to monitor the numbers of eldana moths occurring in the region, throughout the year. This will help us to see the annual trends in moth numbers, which will hopefully assist us in timing our eldana spray programmes more accurately to coincide with the moth peaks.

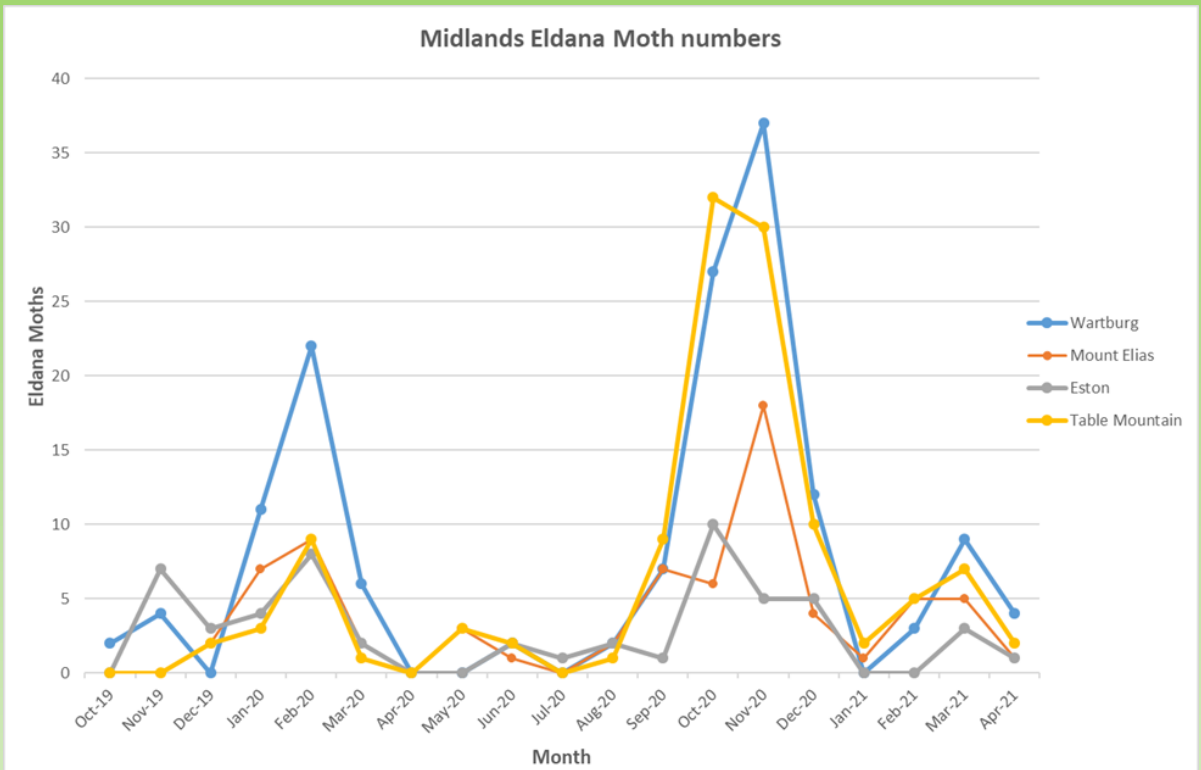
Our moth traps have been in operation since October 2019, so we are starting to build up a dataset that will start to provide us with valuable information regarding eldana activity in the Midlands.

The periods when there is the most moth activity and resultant egg laying and hatching of first instar larvae, is the most effective time to be spraying eldana controlling chemicals. Once the borer has entered the cane stalk, there is little to no chance of killing it by spraying.

Typical eldana moth peaks are in September, October and November as well as a secondary peak in March, April and May.

In the following graph, it can be seen that the secondary peak actually occurred earlier in 2020 than what is considered typical, with a sharp increase in the January/February period. This may have been slightly affected by the fact that, due to Covid 19 restrictions, collections from the traps was not timeous during April 2020, with resulting samples being compromised due to exposure to weather.

The main moth peak is very evident in the graph, with numbers rising over the September to November period, as expected.



Dr. Lona Basdew, SASRI's Biosecurity scientist, has suggested that the good rains in December 2019/ January 2020 would have resulted in higher humidity levels over that period, which is favourable for egg hatching (higher humidity promotes oviposition by adults, as well as cuticular softness in the egg which makes hatching easier). This results in more larvae, pupation and ultimately increased moth numbers. This could in part, explain the early secondary peak.

It is particularly important for growers to continue with scouting for eldana on their farms. The scouting that is done during the July to September period will help to plan the spray programme that targets the main September, October and November moth peak. Typically, during this round of scouting, most attention will be paid to the fields that are to be harvested next season.

Please do not rely solely on the SASRI Biosecurity teams for this task. If you would like to send selected staff members for Eldana Scouting Training, please contact Janet Edmonds. The Biosecurity teams will be conducting training sessions later in June.

Remember: The spraying of chemicals to control eldana is only one component of an integrated pest management strategy and should never be seen as the "silver bullet" to keeping the pest at bay on your farm. Other components of the strategy include: Optimum soil health and nutrition, variety choice, harvest cycle (optimal crop ages), field hygiene, farm biodiversity (eldana habitat management to promote natural predators) etc.

Midlands long cycle variety trial results

The variety trial on Donovale Farm in the Table Mountain area was recently harvested. By way of reminder, this is a long cycle (22-24 month) trial which was planted in October 2013 and has now been harvested four times. It is a high potential soil site (Shortlands soil form) on a South facing slope.

This harvest, most varieties yielded well in terms of Tons Cane/ha, with N48, N52 and N12 yielding in the 149 to 160 t/ha range.

The top three RV content varieties were N55, N41 and N12. This meant that the top performing variety in terms of Tons RV/ha was N12 for this harvest.

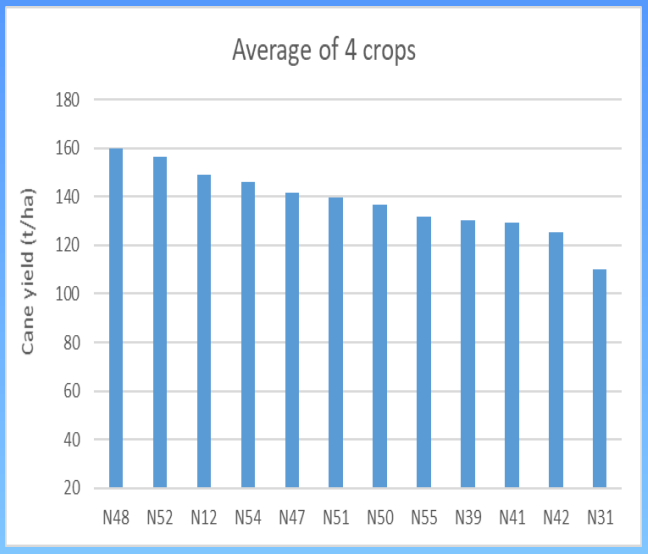
If we look at the average of the four crops, the results can be seen in the graphs, with N12 showing a consistently superior performance in terms of Tons RV/ha.

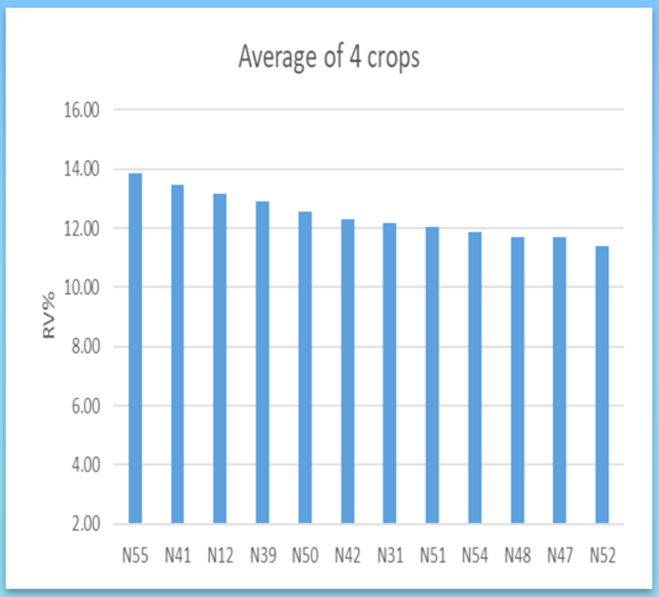
Clearly the 24 month cycle is to the advantage of the N12, with the newer varieties lodging severely and possibly deteriorating in quality. If this trial was cut on a shorter, 16 to 18 month cycle, the ranking may well look quite different.

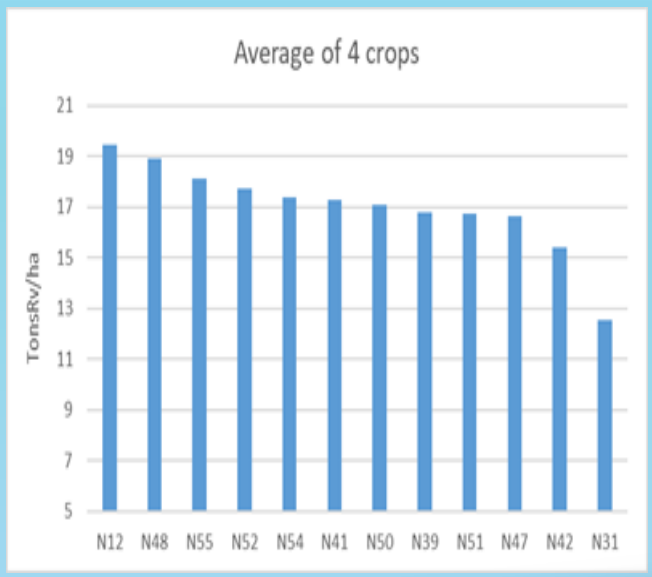
Interestingly, the N55 which is actually a coastal long cycle variety, has performed consistently well in terms of RV content, so could well be considered for the Midlands long cycle and particularly for the growers who are farming at greater distances to the mill.

The graphs here show the performances of the different varieties in terms of Cane Yield (t/ha), RV% and Tons RV/ha as averages over the 4 crops harvested.

If there are any queries related to the topics discussed in this newsletter, please don't hesitate to give me a call to discuss further.







Extension Matters