

Sorghum Midge

Over the past few weeks, there has been some sorghum midge found in the lower Liverpool Plains area. During the season there has been minimal activity so far. However there is the chance that we could see greater midge numbers through to the end of the season due to the high humidity, plenty of late sown sorghum and the main season crops with a high number of later tillers in the area.

Sorghum midge biology

The adult sorghum midge (*Stenodiplosis sorghicola*) is approximately 1-1.5 mm in length, about one quarter the size of a mosquito. The abdomen is orange-red in colour and it has a single pair of wings which are transparent. The female midge lays up to 50 eggs in the flower head, prior to and during flowering when the yellow anthers are exposed. The susceptible period may only last 5-7 days per head, but where crop flowering is uneven, this danger period may extend to several weeks.

The larvae feed on the immature seed preventing it from developing, and resulting in pinched seed and high screenings. When midge populations are high, losses can approach 100% if control measures have not been taken. A generation is complete in 2-3 weeks. Heavy rainfall reduces midge emergence from the infested heads, but the high humidity before and after increases it.

Female midge numbers are highest between 8 and 11 am, which is when inspections should occur. Monitor midge activity on emerged heads before they start to flower as midge may cause economic damage if present in large enough numbers.

Midge are very mobile and sprayed crops can be rapidly reinfested. If midge are just as abundant within 1 or 2 days of spraying they almost certainly have moved in from elsewhere. Female midge moving into a treated crop, deposits only a few eggs before dying instead of the usual 20-50. However, respraying may be necessary once the residual effect of the applied chemical is gone.

Calculating whether to spray...

Spraying should occur if the following occurs:

$$\frac{NM}{R} \text{ Is greater than } \frac{(C \times W)}{(1.4 \times V \times \text{Residual})}$$

Where:

NM = 'midge tested' rating

R = Midge Rating

C = cost of control (\$/ha)

W = row spacing (cm)

V = value of crop (\$/t)

Residual = residual life of chemical in days

In deciding to spray, consider the benefit/cost ratio of spraying (the value of yield saved compared to the cost of control). The above example demonstrates break even figures (each \$1 spent on control returns \$1). For example, if your preferred benefit/cost ratio is 2 (you prefer to save \$2 for each \$1 spent on control), then the midge numbers at which you would decide to spray are twice those in the above example. Use a benefit/cost ratio that suits your crop risk assessment and personal preference.

For further information contact your local PHR agronomist.

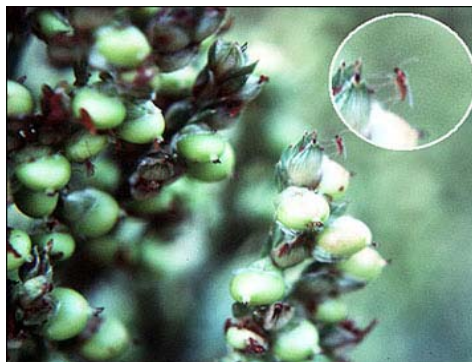


Figure 1.
Sorghum Midge
(*Stenodiplosis sorghicola*)

February Weather Summary

visit http://www.pursehouserural.com.au/services/weather_station.html

Location	Average Temp (°C)	High Temp (°C)	Low Temp (°C)	Number of Days >35°C	Rain mm	Average Wind Speed Km/h	High Wind Speed Km/h	Dominant Wind Direction
Cattle Lane, Willow Tree	20.4	34.7	7.3	0	94	9.3	45.1	SE
"Murlow", Quirindi	20.2	34.7	7.7	0	120.5	7.4	46.7	SSE
Mullaley	21.4	35.1	10.7	1	72.8	12.6	57.9	SSE
"Dow Site", Breeza	21.4	35.8	10.1	1	124.4	8.6	66	SSE

Seed Quality - Getting a head start...

The welcome summer rains have seen many start looking for good planting seed for their next winter cereal crop. Choosing varieties that are best suited to your area and needs is vital for a good germination. With so many new varieties, diseases and pests continually coming to our attention, it is important to obtain sound agronomic advice when looking forward. Good quality seed is essential for getting a head start for the forthcoming season.

When selecting seed for sowing, ideally use seed with high germinations and a percentage above 90%. This can be simplified by purchasing seed from a certified reseller. However, when seed is carried over from previous seasons, fewer options are available. Where possible, be sure to reject seed with germination less than 80%. Home germination tests, while economical, may not identify weak or damaged seedlings.

Germination tests are for seed viability only and will only tell you if the seed is capable of growing. Other properties also assist in a good start and vigorous growth. This all interacts for a better establishment. Ensure good quality seed by having carryover seed that has been stored on farm tested by an accredited laboratory. Now is a great time to be prepared early for the winter ahead by having this done.



When sowing seed that may have been affected by drought in the previous year, ensure good soil moisture at sowing. The depth should also be carefully monitored to ensure it is not sown too deep. Drought affects vigour, which reduces the seed size. Small seeds in turn contain less starch reserves, relating to less energy and vigour at emergence. When this is the case, there is also less energy to fight off seedling stresses, such as pests and disease and environmental factors such as waterlogging. Seed size is therefore an important factor to consider at sowing. Select seed where possible that has at least reached soft dough stage and is of reasonable size. The process can be compared with pulses and oilseeds with larger seeds likely to perform well at germination.

Soft dough is a critical stage at which the crop has ceased supplying nutrients to the grain. Seed fungicides and herbicide treatments may also affect germination. While it may seem early to be thinking about winter, after the summer we've experienced it might arrive sooner than we realise. Therefore it's important to check seed quality early for strong crop establishment.

For seed requirements and testing of stored seed contact your local PHR branch or agronomist.

Upper Namoi Cotton Growers Association Annual Field Day

2nd April 2008

Meet 9.30 am Court House Hotel, Gunnedah

Field day includes visits to:

- *Roundup Ready Flex Varieties
 - *Lateral Move Irrigators
 - *Soil Moisture Sensor Comparisons
 - *2-4D Damage
 - *Variety Trials
 - *High Value Rotation Crops
 - *Crop Competition Winning field
- 5pm finish with refreshments at the Court House, thanks to Monsanto, Deltapine and CSD

The day includes transport, lunch and drinks
Lucky Bus Door Prize

(An all-expenses paid monthly holiday around the world to study mating characteristics of ping-pong balls—that got you going!!!)

Quirindi Special

Ruddweigh 600mm Weigh Bars

2000kg with leads

1 Set Only

\$900 + GST