

District reports

Emerald

Hot temperatures throughout December and January have driven a majority of the Central Highlands crop to a relatively early finish, although there are some later crops throughout the district. At this stage, defoliation has been predicted on some of the first crops in late January/early February with picking set to begin sometime about a fortnight after that.

Crops generally look very good at the moment, although there is an unknown associated with the effect of the high temperatures (40°C plus) during the flowering and boll maturing stages. It is suggested that night temperatures over 25°C and day temperatures over 38°C will affect flower pollination and the quality/quantity of the subsequent boll.

A hailstorm hit the western side of the Emerald Irrigation Area on November 11 affecting about 3500 hectares. Of this, about 1500 hectares were written off and ploughed out. Crops such as soybeans, navybeans, corn and sunflower will have been planted in these areas. The damage will cause significant delay to a number of crops in the region.

A freak storm hit the Gindie–Orion area south of Emerald. Some farms got as much as 375 mm (15 inches) of rain in a seven hour period. The flash flooding from this caused some areas of cotton to be submerged for a while.

Helicoverpa pressure has generally been very moderate and the use of softer control programs was generally sustained through to Christmas time, a point when many crops were cutting out. Mirids have been constant and the delayed use of broad spectrum control measures meant that



they lingered on longer than usual.

Aphid numbers were generally much lower through the October–mid December period than they had been for the past two seasons, although populations started to increase by late December.

Silverleaf whitefly (*Bemisia tabaci* B-type) populations have increased over previous seasons in the Emerald Irrigation Area. Dr Paul De Barro, CSIRO Brisbane, has been visiting Emerald on a monthly basis this season and observed an increase in populations between November and December. But since the base numbers were very low, this increase does not necessarily mean whitefly will cause any major problems this season, but it is an early warning to be vigilant.

David Kelly
January 17, 2002

Callide Valley

The 2001–02 cotton season has seen a large reduction in the area of cotton planted in the Callide Valley due to lack of rain. Falls in the district have been few and far between in the past months, leading to a depletion of on-farm storages which have all but dried up — causing growers to rely on frustratingly slow underground supplies. Even the dryland farmers have not had the moisture to plant.

Those growers with water are struggling to keep it up to the demand, which has been exacerbated by recent heat conditions. While the hot weather has dried crops out quickly, it has provided other benefits.

The conventional crops have had moderate to heavy insect pressure so far and the Ingard plant is doing well with only one mirid and one helioverpa spray to date.

With little prospect of rain in the near future it looks like some growers may do it tough this season.

Ross Shepherdson
January 17, 2002

St George

In general insect pressure has been light to medium with only a few small distinct egg lays. So far there have only been a couple of blocks sprayed with an SP — a result of the 'softer' IPM approach that is being aimed for by the Area Wide Management in the St George Irrigation Area. It is hoped this will be extended until January 30.

Mirid pressure has been above normal and they have been a headache, especially on Ingard crops. *H. punctigera* continue to be dominant, although the Ingard expression has been particularly good this season.

Aphids and mites are only present in low numbers and are just starting to build up. There has been minimal plant growth regulator usage throughout the district. Commercial demonstrations using petroleum spray oils are being carried out to test their effect on sucking pests and are showing some interesting results.

Variable, and in some cases useful, rainfall fell on January 9. This ranged from nine mm up to 150 mm around Mitchell to the north, which is in the Maranoa catchment. This should top up Beardmore dam but not provide enough security to finish off this season. There is not enough for flood harvesting and some crops have run out of water.

On February 22 the St George field day will be held in conjunction with the annual St George cotton dinner and awards night.

Jack Holland
January 17, 2002

Dirranbandi

Dirranbandi is currently experiencing extreme dry conditions with a number of crops being pulled out of production or recently receiving their last irrigation. The areas that remain in production still face a shortage of water to finish off the crops. A flow in the river or a few inches of rain is still required for most growers to ensure enough water to finish the season.

On a more positive note the pest pressure in the

area has been down compared to previous years with only half the usual number of sprays being applied. In some cases no SPs have been applied at the time of writing.

In December a beneficial identification morning was held for growers to see first hand the types of beneficial insects in the field. After a look at the various sampling methods available growers were able to identify the insects in the field. It proved to be a good morning which ended up as more of a mini field day.

After a cool start we have had anything but cool temperatures for the past few weeks with temperatures in the high 30s to low 40s being quite common. This has resulted in the cotton taking off with crops well into flowering with bolls being set. Fruit retentions appear to be quite good at this stage. Here's hoping for that flow in the river to come soon to ensure that all of this is not put to waste.

Sarah Kerlin
January 22, 2002

Mungindi

The season for the past few months has been very hot and dry — some would say just perfect for irrigated cotton! Irrigators have been flat out with most farms on a 10 day cycle. Water usage at each irrigation has been very high. But most growers are confident that they have enough water to finish the season.

Generally insect pressure has been low, although some areas have had big egg lays lasting for 10 days or so. Spray numbers on conventional cotton vary from four to nine in the district, with most Ingard crops receiving one mirid spray to date. Some Ingard fields were sprayed in mid January for a gradual build up of *Helicoverpa* pressure.

The district has had a relatively soft approach to insect control so far. Pyrethroids and associated products are only just starting to be used on some farms now, while there are others who have managed so far to avoid using any conventional chemistry. Many growers have endeavoured to preserve their beneficial insects

early in the season, even though it has been at considerable cost per hectare. Spray intervals have still been regular enough for what could only be described as a low insect pressure year here.

Foliar fertilisers containing nitrogen and potassium have proved popular this year as growers attempt to avoid early cutout and fruit shedding in a number of fields. It is not hard to find cotton in the district at 15–17 nodes with white flowers to the top. These crops are short and not closing over, but in a lot of instances hold a decent fruit load. Hopefully what these fields yield will be a pleasant surprise. Our earliest cotton will be picked at the end of March and some could linger on well into May if the top crop is picked.

There are mixed feelings about how the season might pan out yield-wise. Some growers are quite happy with their crops' progress to date, while others hold no great expectations. As it always does — time will tell!

Julie Scriven
January 21, 2002

Macintyre Valley

I spent much of my November report talking about the cool start to the 2002 season and the number of cold shock days experienced immediately after planting. What does one do now? The weather has certainly changed and the irrigated crops are growing very quickly and in fact are now not far behind where they normally should be at this time of the year.

Day temperatures of 38 to 42 °C, with mild night temperatures of around 22°C since mid December, have turned the yield prospects around dramatically. MacIntyre Valley growers were extremely busy in the lead up to Christmas with side dressing, application of lay by herbicides and irrigating. Irrigating has been full on with this intense heat but the crops look magnificent and are now fruiting up well.

The valley experienced a good flow in the river in late November and early December — this greatly assisted many growers who may have

been a little short on water for the season. Most on-farm storages were filled and some growers in the western end of the valley were able to use it for their first crop irrigation.

The later planted dryland crops are holding on well, but they will need rain in January. The dryland area is well back on previous years, mainly due to price prospects. However those long-term growers who use cotton as a rotation crop in their farming program have stuck with it.

There was light hail reported in many parts of the valley throughout November and into early December. Unfortunately an area of some 800 hectares of cotton was lost around Boggabilla and to the east of Goondiwindi from very heavy hail in mid November. Luckily the balance of the hail only caused leaf tear and stem bruising and resulted in some crop lateness.

Both Ingard and Roundup Ready crops are performing very well this season and growers are anxiously waiting for the release of the two Bt gene with Roundup Ready in the future.

The annual Macintyre Valley cotton field day is scheduled for Wednesday February 27. Please watch out for details in the local media closer to time.

We look forward to better growing conditions for the balance of the season and if they eventuate the longer-term average yield for the valley should be achieved.

Peter Graham
January 15, 2002

Gwydir

The past four weeks have been a great reminder of how a short productive period can make a cotton crop. In fact, although we all bemoaned the cold start, it is hard to recall many poor starts that have resulted in poor crops.

In mid December, growers were concerned about crops being two weeks behind, cutting out too early and having low yield potential. Mid January sees Gwydir Valley growers predicting crops that are average or better, with picking anticipated to begin on time in mid-March.

What has made the difference? It has been a combination of temperature, sunlight and low insect pressure. The weather finally warmed up at Christmas time, and although at times it was hotter than either the plants or the irrigators really needed, it was certainly welcome after the cool weather of November–December.

Low humidity, high winds and high temperatures led to irrigation turnarounds more usually seen at the peak of boll filling. But the plants enjoyed the sun, the temperature and the water and made some rapid growth in terms of number and size of nodes. At the same time the insect pressure remained moderate to low as it has been all season, and this has led to excellent fruit retention.

Typical insect control programs have been three to five sprays on conventional and zero to one sprays on Ingard, with the one spray being for sucking pests in most cases. Aphid activity has been low, and has mostly been controlled by the endosulfan being used on helicoverpa. Mites have also been quiet, and avermectin–emamectin sprays for grubs have kept any small populations from increasing.

With the high fruit load being set in a short period of time, many growers are turning to foliar and water-run fertiliser to maintain adequate nutrition, especially with respect to nitrogen and potassium.

The difficulties remaining from the cool and somewhat wet start to the season revolve around weed control where this could not be achieved prior to Christmas, or where crops have not closed in due to slow early growth or high boll load. There are still cultivators and sprayers working on this problem in mid January.

Growers will be hoping for an average to warm finish to the season to realise the potential of what now appears to be a good crop, and particularly to finish off any of their weaker or later crops which still have a bit of work to do. Ginning should commence in early-mid March, and be wrapped up a little earlier than usual due to the reduced area planted to dryland this season.

Preparations are underway for the annual Charity Dinner at the Australian Cotton Trade Show in May. This year's dinner will continue the support for the Cotton Industry Rural Medical Scholarships and the Westpac Rescue Helicopter, as well as featuring the awards for Australian Cotton Grower of the Year and the Gwydir Valley CGA Awards. Seats are always in high demand so please make your bookings early to ensure that your evening at the trade show is just as enjoyable as the days' activities.

Harvey Gaynor
January 19, 2002

Lower Namoi

Since mid December conditions have been near perfect for irrigated crops. Temperatures have been in the mid 30s during the day and 14 to 20° C at night. As a result of this crops have recovered, but many fields have short cotton plants close to cut out. Most crops have very good fruit loads and this has also contributed to the early onset of cutout. The implications on yield of this early cutout and failure to fill in the rows is unknown.

Crops that have been managed for good growth look particularly impressive and have very high yield potential. Many crops remain uneven and a bit ragged looking as a result of the poor start and high disease pressure. Dryland crops have good potential but will require rain by January 20 to reach this potential.

Crop water use has been high during the past month as a result of the temperatures and dry winds. Some growers now face the prospect of running out of water before the crop is mature. Crop water use has sometimes exceeded 11 mm per day during the past two weeks. Most fields have now received their third irrigation and if the present dry spell continues at least another three waterings will be required.

Helicoverpa pressure has generally been low so far. Everyone is still expecting the big egg lay but it shows no sign of happening yet. Newer chemistry has been utilised extensively in the Namoi and it has worked well. IPM strategies

have been used by nearly the whole valley.

Almost no pyrethroids have been used by mid January — a situation that has never happened before. Conventional crops have good fruit loads and Ingard crops have exceptional fruit retention.

Mirids have been more active than normal but aphids and mites have been at very low levels.

Most diseases are now in remission although some Verticillium is still active. There are no confirmed cases of Fusarium in the Lower Namoi but the disease continues to progress in adjacent production areas.

New York cotton futures have continued at low levels. It is only the low Australian dollar that is keeping prices off the bottom. Prospects for a price rally before picking seem unlikely.

With picking is now just around the corner everyone awaits the first results in anticipation of a good year. I am sure there will be some surprises this year.

Robert Eveleigh
January 18, 2002

Upper Namoi

The past two months have seen a dramatic turnaround in the performance of crops in the area. Late November and early December produced wild storms, in particular December 4 saw Gunnedah receive a violent weather cell with recorded winds in excess of 100 km per hour. One report by a damage inspector included winds up to 180 km per hour!

As you can imagine this storm caused a corridor of damage across the area, but crop damage was minimal. In addition, some isolated hail storms were recorded across the valley. Distribution was very limited, but farms within the hail belt will suffer significant crop delays.

Late December saw the arrival of summer with the heat wave occurring over the Christmas–New Year period. Growers who were able to keep the water flowing welcomed this. This period promoted growth and crops within the valley

were flowering at New Year. Fruit loads in general are very good, with the transgenic varieties exceptional — especially the stacked varieties of Roundup Ready–Ingard. The combination of high fruit loads and high retention figures have some growers and consultants concerned about the possibility of an early cutout.

Insects have been very kind to date. Egg lays have been sporadic and generally regarded as low. Beneficial counts are behaving in a similar manner, and the weather patterns are having a significant impact. A noteworthy point is growers who have employed an early routine food spray program are reporting higher predator values.

Mirids appear to be following the storm activity in the area — an occurrence here every season.

Pheromone traps across the valley have recorded a very late *H. punctigera* flight (early January). This is unusual when compared to the previous four seasons' data. It is a shame Lepton tests are not available this season, since this is one season where this technology would have been invaluable.

Area wide groups are progressing well and vary in the level of grower involvement.

Overall crops have recovered from the cool season start and are responding to the heat with good growth.

Mark Hickman
January 11, 2002

Macquarie

Conditions in mid January continue to be favourable for cotton production with warm days, mild nights and cloud free skies. Day degree accumulation is slightly up on average, although very similar to the same period last year. Many crops around the valley appear very short, due to the cold start and number of cold shocks early in the season. Only the very earliest crops have reached row closure.

Generally crops have high fruit retention with yield potential looking promising. A concern of growers is the high number of bolls on relatively

small plants. Last year late January saw some serious shedding of fruit during hot conditions that impacted on final yields. Whether the small plants are able to hold on to and mature the good fruit load they are carrying is still to be seen. If they can, above average yields and a relatively early finish could be on the cards.

Insect pressure has not been excessive so far this season. Especially fortunate has been the very low percentage of *H. armigera* in the population. Lepton tests and egg collections have rarely been higher than 20 per cent all year. Many fields still remain 'soft' in mid to late January and there was not the usual rush to get the first pyrethroid on when the window first opened on January 1.

Conventional cotton has received five sprays on average (ranging from two to eight) with many still to receive their first broad-spectrum insecticide. Ingard fields have generally received no *Helicoverpa* sprays to date, with up to a third of these crops requiring control of either green vegetable bug or green mirid. Beneficial populations remain high in many fields and neither aphids nor mites have proved a problem yet.

Many early crops are heading towards cutout, while some of the latest blocks only started to flower in January. If weather conditions remain favourable, earliest defoliations may be applied in late February or the first week of March.

There have been a couple of new *Fusarium* wilt cases detected around Warren over the past few weeks. While still waiting for confirmation from DNA testing, January is a time when wilting and death of large plants becomes very noticeable and the disease is often detected for the first time. Also, high incidence of other seedling diseases early in the season may have masked the effects of *Fusarium* then.

Generally the Maquarie looks well set up for an average to above average year. The main set back has been the cold start with relatively few hiccups since then. All that's needed now is fine, warm weather over the next few months. A jump in the cotton price will also be on the top of growers' wish-lists.

Kirrily Rourke
January 18, 2002

Southern NSW

The season in the Lachlan–

Murrumbidgee has remained similar to those mentioned in the previous report. As of January 18, we have recorded 974 day degrees, which is 260 behind last season. What is more of a concern is the number of cold shock days recorded. As far as records go back we have not accumulated more than 45 cold shock days. This year, we have had 44.

Currently we appear to be moving into some warmer weather with forecasters predicting the next three months to be warmer than average. Insect pressure remained high up to Christmas, with pressure dropping off and remaining low to date. As a result of the low activity, fruit retention around the valley has improved. A concern among growers at present is the low plant vigour due to the cool weather and the impact a large fruit load will have on plants unable to match fruit demands due to the lower biomass.

Crop maturity ranges from 19 to 14 nodes with some crops struggling to maintain good vigour. UNR crops are progressing well with some areas to be cut out early next week. Conventional crops still have a lot of work to do to achieve maximum yield potential and there will be some temptation to push later crops well into February before cut out. Pima fields still remain disease free and appear to be handling the cooler conditions much better than upland varieties but given its season length a dry finish will be required.

Water supply at present remains reasonable for this season but I expect many irrigators will have significantly less water to carry over into next year.

Matthew Mitchell
January 19, 2002