

# Whitefly: From the pilot's seat

By Dean von Einem

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As I write this article it is late February and about 80 per cent of the cotton has been defoliated. It is 6:45 am and I am at the airstrip in Emerald where the whitefly are drifting on the gentle breeze past the office in sporadic clouds. This seems to be the time of the day when they are most active. At their worst it can appear as though there is a shower of rain coming towards you and breathing becomes difficult.

Usually they thin out by 8:30 am, but even in town you can see them any time through the day in the sunlight. Right now the keyboard is covered in white spots, which appears as though I have a bad case of dandruff. Thank God they don't bite!

When they are thick, poor visibility through the windscreen becomes a real safety issue after 10 minutes of flying. We are about to modify the windscreen washers on the aircraft to try to alleviate this.

Aerial agriculture has always been exceptionally good at responding to any plague, pestilence or environmental disaster, such as oil slick control, bushfires, or locust swarms. In this situation we were approached by the crop consultants in mid January and informed we would be busy near the end of the season controlling whitefly.

Everyone knew it would be too little too late and it would only be a band aid for this year. A chemical such as Pegasus had too long a withholding period and a lot of growers had lost that option when so close to picking.

Some growers who compared ULV application to EC felt the ULV gave them longer residual protection and possibly a repellent effect with pyrethroids. Early on it was noticeable on the windscreen if you were spraying pyrethroids compared with other chemicals that there was more whitefly activity in the air above the crop. This became less noticeable as the population grew. Nevertheless there was no other option but to use aircraft and suppress the pest as much as possible with whatever chemistry was available.

Area wide management of this pest is going to become essential in the future and I am sure



Whitefly adults

that once again aircraft, with their speed of coverage, can be a major cog in the mechanism. ULV applications need to be considered carefully in the trial criteria for new chemistry if area wide management is used. In my opinion the use of micronaires and the turbulence caused by the downwash from the wings enables more droplets to contact the underside of the leaf where the nymphs are residing.

Well, these are a few of my experiences and thoughts about silverleaf whitefly. Emerald suffered one of its hottest ever summers this year and we had very little rain. I am sure if we had a week of wet drizzly weather, it would have a serious effect on the whitefly themselves, but the nymphs would still be coming through. A cold winter and wet run up to next cotton season could be a big help.

Dean owns and operates one of the three aerial agricultural companies in the Central Highlands. He is the immediate past president of the Aerial Agricultural Association of Australia.