

## FIELD EVALUATION OF A NOVEL SHEEP BLOWFLY TRAP

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A novel, easy to use, insecticide-free trap (Lucitrap from Miazma P/L, Warwick, Qld) for the sheep blowfly, *Lucilia cuprina*, has been field tested. Lucitrap comprises a synthetic attractant in a long-lasting dispenser and a 2-part plastic trap for fly acquisition and retention. Field trials described here were part of an assessment of Lucitrap's efficacy in suppressing sheep blowfly populations on a property-wide basis.

In 1994/95 trials, at Surat and at Cunnamulla, sheep blowfly populations were compared in 2 matching areas, 1 a control and the other trapped with 1 Lucitrap per 100 sheep (suppression traps). The suppression traps, 130 in Surat and 80 in Cunnamulla, were strategically placed in sheep camps and at or near watering points. They were opened before any expected rise in blowfly populations (August 1994). Fly populations in both areas were measured at approximately monthly intervals with a separate set of Lucitraps (monitor traps, 20 Surat, 14 Cunnamulla) open for 48 hours. During the monitoring period, all suppression traps within 1 kilometre of a monitor trap were closed. The flies trapped in the monitor traps were collected, identified and counted. The geometric means (per trap per 48 hours) of trap catches within 1 area were used as the comparative measure.

The overall mean sheep blowfly catches were lower in trapped than control areas in the Surat (significant,  $P < 0.05$ ) and Cunnamulla (not significant,  $P > 0.05$ ) trials (Figure 1). The seasonal variation in the sheep blowfly populations (Figure 1) followed the expected bimodal pattern with larger spring and smaller autumn peaks. Peak fly populations were reduced by 86% at Surat on 18 October 1994 and 49% at Cunnamulla on 2 September 1994 respectively, by the presence of the suppression traps.

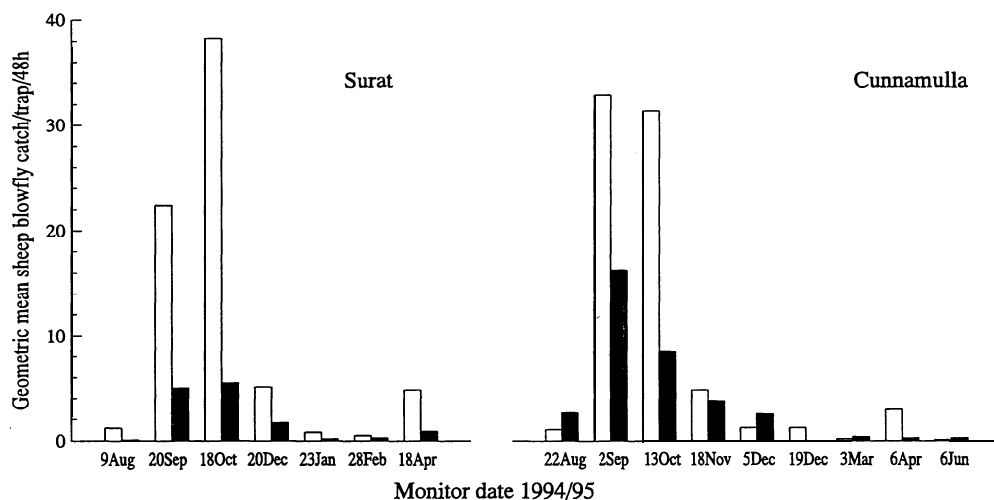


Figure 1. Geometric mean sheep blowfly catches per monitor trap per 48 hours in control (open bars) and trapped (solid bars) areas in Surat and Cunnamulla

These results were obtained during a year when sheep blowfly populations and fly strike incidence were low, due to extended drought conditions. Under these conditions, the placement of Lucitraps at a density of 1 trap per 100 sheep resulted in a suppression of sheep blowfly populations.

This study was supported in part by Australian woolgrowers and the Australian Government through the Australian Wool Research and Promotion Organisation.