

SUMMARY

INTRODUCTION

Chemical insecticides are currently essential for the control of *H. armigera* in cotton and are likely to remain an important component of control strategies for the foreseeable future. However, insecticide resistance in *H. armigera* is a major threat to the economic production of cotton in Australia. The development of resistance in *H. armigera* has been delayed by the Insecticide Resistance Management Strategy, but levels of pyrethroid and endosulfan resistance have gradually increased over recent years. As resistance to pyrethroids and endosulfan increases, so does the use of alternative chemicals, such as thiodicarb and organophosphates. It is essential that the use of these chemicals and any new chemical that become available is carefully managed to avoid, or delay resistance. This can only be achieved by establishing effective resistance detection and monitoring techniques and understanding the underlying resistance mechanisms.