

## Sustainable viticulture

When considering the long term management of your vineyard it is important to consider the need for diversity in the biological systems present.

Understanding the interactions between flora (vines, cover crop, shelterbelts and remnant indigenous vegetation) and fauna (birds, insects and soil organisms) will create an appreciation for the long term need for vineyard biodiversity.

When all plant and animal species regarded as a threat to productivity are eliminated this has a direct impact on ecological balance. The use of broad spectrum insecticides does not discriminate between pest and beneficial insects and the consistent use of herbicides may lead to sterile soil conditions. Neither are sustainable.

The past ten years has seen a drift away from traditional monoculture systems with an increasing interest in organic, biodynamic and other sustainable viticultural practices. The recent trend of minimal input to reduce production costs is also part of this development. Concern for the effects of CO<sub>2</sub> on the environment is also here to stay.

The Adelaide Hills has experienced a gradual trend towards the use of organic mulch to reduce summer soil temperatures, cut water usage and irrigation running costs.

There also has been experimentation with the use of livestock for weed control over winter. While there has been much discussion about the benefits of this practice, it does reduce the need for slashing and herbicide spraying. However, the addition of a stock trough and secure fencing is essential.

Infield has also experimented with the sowing of various mid-row cover crops. In 2007 trials in the use of buckwheat to attract parasitic wasps for the control of Light Brown Apple Moth in local vineyards proved their worth, however, in times of tight budgeting, permanent sward grasses, such as perennial ryegrass are now among the favoured cover crops in the Adelaide Hills.



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## Cover cropping and biodiversity



PLATE 1  
Traditional mid row  
planting



PLATE 2  
Two week growth on  
buckwheat



PLATE 3  
Pollinating insects

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