

Isoxaben tankmixes provide safe, effective residual weed control in vines

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Summary Effective weed control in young vines is critical to obtaining good early growth and plant establishment. Reliance on the use of knockdown herbicides can give variable results, depending on spray conditions, weed species and size. This practice is also time consuming and may be impractical due to potential vine injury.

Use of a residual herbicide program involving optimized tankmixes would save labour and may be safer to young vines.

Dow AgroSciences conducted 15 trials between 1990 and 2004 to determine the value of tankmixes of isoxaben at 281.25–562.5 g a.i. ha⁻¹ with either pendimethalin or oryzalin at their label rates. Seven of those have shown that tankmixes of isoxaben provided better control of broadleaf weeds than either of the commercial standards pendimethalin at 2970–3960 g a.i. ha⁻¹ or oryzalin at 2250–3400 g a.i. ha⁻¹. There was no evidence of grapevine injury in any trial.

Excellent grass and broadleaf weed control of six months duration was achieved in six of the seven trials noted above. Optimum conditions required for best residual control were identified as a trash and clod free

undervine area, with treatment application followed by significant rainfall within two weeks to incorporate herbicides. Residual control in these trials was longer than those reported by Tucker and Chambers (1990), where similar rates of either pendimethalin or oryzalin were applied alone or with simazine at 0.8 kg a.i. ha⁻¹ and gave up to about 100 days control.

Keywords Isoxaben, pendimethalin, oryzalin, grapevines, residual, weed control.

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REFERENCES

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