LIGHT BROWN APPLE MOTH:

Why This New Aussie Invader is Unlikely to Become a Pest of Washington Grapes

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Light brown apple moth (LBAM), a leaf-rolling caterpillar pest from Australia and New Zealand, has recently (February 2007) turned up in northern California and is the focus of an eradication effort. In Australia LBAM has an extensive host range but is a significant pest of a number of horticultural crops including wine grapes. In fact, in Australian grape production it is considered to be the most important potential pest. However, LBAM varies considerably in its importance from region to region and from year to year. Currently, when it occurs, it is managed by a combination of biological control and the use of selective pesticides like bt and insect growth regulators.

The major influence on LBAM population dynamics is the weather. It is an insect that requires a cool temperate climate, such as that found in coastal areas of Australia and New Zealand. It does *not* do well in the hot, dry inland areas of Australia and populations cannot develop at temperatures above 90F. There is no 'programmed' overwintering stage with adaptations for surviving below-freezing conditions. In Australia below-freezing temperatures are short-lived and rare. Development of LBAM does not occur at temperatures below 45F and it is virtually certain that exposure to 30-32F temperatures for more than 24-48 hours would kill all stages. So basically, the extreme winter and summer climates of eastern Washington would be lethal to an LBAM incursion! This is of course not true for many parts of California, particularly the northern, coastal grape-growing areas, where an established LBAM population would likely thrive.

In conclusion: it is very unlikely that this new Aussie invader will pose any threat to Washington viticulture, even if it finds its way here. Rather, it may become just one more difference between the pest complexes affecting Californian and Washington wine grape production.

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