

Viticulture Pest Alert!

Multicolored Asian Lady Beetle (*Harmonia axyridis*) on Grapes

The multicolored Asian lady beetle (MALB), a late-season inhabitant of vineyards, can significantly impair wine quality. Within the past two years, the multicolored Asian lady beetle has become problematic in several vineyards (and wineries) across the Midwest.

In vineyards, the lady beetles are attracted to the ripening grapes as a late-season source of sugars. They may congregate, often by the hundreds or thousands, in and among grape clusters during late August and September (Figure 1). Although the beetles may become primary pests of grapes (i.e., cause direct yield loss), they can have a devastating effect on wine quality when sufficient numbers become trapped in the harvested grapes which then are crushed along with the grapes at the winery. The beetles excrete an orange-colored defense chemical when agitated or stressed. This chemical causes the wine to smell “dirty” (a musty, damp basement odor) that masks all varietal characteristics. Preliminary data from Ohio indicate that wine made from grapes that contained as few as two beetles per lug of harvested grapes is negatively noticeable to wine connoisseurs, and at least half of wine drinkers will notice a diminished flavor from wine made with grapes that contained 24 beetles per harvest lug. The problem of excessive numbers of beetles in vineyards at harvest time appears to occur predominately in late ripening varieties such as Cabernet Franc, Cabernet Sauvignon, Riesling, Vidal and Vignoles, but earlier ripening grapes that are prone to cracking due to their thin skins can also be heavily infested.

The beetles, a beneficial insect introduced some 25 years ago by USDA, also has emerged as a significant late-summer nuisance for homeowners as they congregate within and around structures in preparation for overwintering (Figure 2).



Figure 1. Multicolored Asian lady beetles feeding on grapes



Figure 2. Multicolored Asian lady beetles clustered in homesite in preparation for overwintering

Remedies for the Grower?

- Scout vineyards several days prior to harvest to detect the presence and abundance of beetles.
- Mechanical or hand harvesting during the daytime may sufficiently shake the vines to cause the beetles to leave the grape clusters ahead of the harvester. However, night harvesting may not create this effect.
- There are no insecticides registered for control of the MALB. One option for growers is to contact their state department of agriculture and request an emergency 24C label for bifenthrin (Capture). This pyrethroid insecticide is highly efficacious against the MALB and has a tolerance established for grapes. This product would be highly desirable for control of MALB in a vineyard nearing harvest due to a 1 day PHI.

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