Controlling botrytis on two fronts

The Geelong area is one of the oldest wine-growing districts in Victoria, going back to the mid 1800’s with many of the earlier varieties originating in Switzerland. In the late 1870’s, an outbreak of phylloxera required most of the vines to be removed and destroyed. The district experienced a resurgence in the 1960s and the area has now developed into a thriving region known especially for Pinot Noir, Shiraz and Chardonnay.

Robin Brockett is the wine maker, viticulturalist and vineyard manager at Scotchman’s Hill on the Bellarine Peninsula, overseeing 100 hectares of vines including Pinot, Chardonnay, Sauvignon Blanc and Shiraz varieties. While they budget on yields of 7 tonnes per hectare or better, the prime management focus is grape quality.

Long experience in local conditions has assisted Robin to develop a strategic approach to disease management. “Once in every three or four years is a bad season for botrytis but we follow a good spray program so we don’t really have any problem with botrytis at all,” said Robin. “The spray program commences around the end of November for Chardonnay and Pinot vines with the one Scala® fungicide application at 80% cap fall. We have been using Scala since it was first registered five years ago within such a program”.

The later varieties such as Shiraz and Sauvignon Blanc are sprayed around the middle of December also at 80% capfall. White wine varieties receive a second botrytis spray, a dicarboxamide (Group B) at bunch closure in mid to late January. Robin said, “The reds don’t receive the bunch closure spray - in 15 years we haven’t had the botrytis problem in reds, they only receive the one botryticide at flowering (in addition to a protective program).”

Concentrate spraying is used for fungicides, applications early in the season from budburst use a water volume of 250 L/ha increasing to 500 L/ha for the 80% capfall spray. Scala is tankmixed to give a chemical application rate of 2 L/ha.

“This spray program gives us good control of botrytis and takes into account resistance management.” Robin added “Another reason I like Scala is because it has an affect on laccase enzyme activity. It stops that enzyme forming which if present can make the wine go quite brown”.

Botrytis infection in grapes is often assisted by the presence of light brown apple moth (LBAM) which damages the berries while feeding, providing an entry point for the fungus. In turn LBAM infestations are assisted by the presence of weeds around the vineyard which act as both a harbor and alternate feed source for the moth.

Robin is fully aware of this relationship and tackles the problem with an integrated approach.

“So often with botrytis, when we open up the bunch, we find LBAM inside. By eliminating the LBAM we have eliminated a lot of the potential botrytis problems.” Robin explained that LBAM development is closely monitored by inspection of vines for signs of eggs. Control starts with Mimic* insecticide applied at the start of flowering (moth larvae at 6th instar stage) and a second spray two weeks later to complete the program.

At Scotchman’s Hill grass cover is maintained between the rows and sprayed for broadleaf weeds every second season with Jaguar® herbicide during winter. “Weed control not only assists with LBAM but reduced the competition from weeds for both soil moisture and nutrients, especially where young vines are involved. Our weed control under vines includes spraying with Roundup® in the winter and Basta® over the Spring / Summer period through to leaf fall. Basta controls the weeds that are left by glyphosate,, and it doesn’t translocate into the vine if there are any low canes or water shoots”. concluded Robin.