

Bud Fruitfulness Assessment

Bud Fruitfulness

The fruitfulness of dormant buds is determined during the previous growing season (November to January). The number of fruitful buds left on the vine will influence the potential yield for the following year. The number of buds to be left on the vine is a difficult decision for the grower to make as other factors will also have an impact on final yield (i.e. flower number, set, bunch size, berry weight, climatic influences etc). However, knowledge of the fruitfulness of dormant buds prior to pruning can aid the vineyard manager in decision making and help prevent low yields. Clients of our service have found data collected over a few seasons very useful in setting pruning levels (eg sometimes spur pruning with Sauvignon Blanc leads to low crops whereas canes are more fruitful).

Bud Structure

Grapevine buds are composite buds. They consist of a central primary bud with a smaller secondary bud on either side. If the primary bud is dead or missing, the secondary bud normally shoots. Secondary buds can be much less fruitful than primary buds.

Bud Dissection

Measuring bud fruitfulness by dissection involves removing the top of the primary bud under a microscope. The outer tissue is then peeled away to reveal the developing inflorescence. One or two inflorescences are easily identified, the third (if present) is much smaller and may be more difficult to observe. The presence of one or two inflorescences is sufficient for the bud to be considered fruitful.

Primary Bud Necrosis

The incidence of primary bud 'death' (necrosis) can be high in some varieties. In some seasons Shiraz, in particular, is known to be susceptible to primary bud necrosis.

When a primary bud is no longer viable one of the secondary buds will usually shoot. These buds are generally less fruitful and may result in low yields. Primary bud necrosis tends to be more common in vigorous vines with long internodes. If the crop load is low due to reduced fruitfulness the vine will not be slowed down and a 'cycle of excess vigour' can result. Knowledge of bud fruitfulness allows the manager to formulate a strategy against this (eg. leaving more buds for a season(s) or shoot thinning/leaf removal to increase light penetration into the canopy).

If you are interested in joining our bud fruitfulness mailing list please fill in your details below and fax, mail or email to us. There will be a limit to the number of tests that will be performed so you will need to book early.

Company:

Contact Name:

Address:

Suburb: **State:** **Postcode:**

Phone: **Mobile:**

Email:

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