**Bud fertility and bud mite analysis of grapevine: a service performed by ARC Infruitec-Nietvoorbij**

Bunch initiation, on one year old shoots that are used to prune bearers (two-bud spurs, half-long- or long bearers), takes place during November, December and the first half of January of the previous year. Determining bud fertility by using a stereo microscope is a handy tool to supply producers with information that will help them to determine how the long bearers must be that they need to prune to ensure profitable yields. However, the bud fertility that is determined is only an indication of how many bunches are present in a bud at the time of analysis. Climate conditions during time the buds start to sprout, soil moisture and nutrient shortage can eventually influence the number of bunches that will develop. It might be that tendrils or tendrils with a few berries on will develop in the place of bunches if conditions are unfavorable.

For bud fertility and budmite analysis producers can send shoots/canes to the Viticulture division of ARC Infruitec-Nietvoorbij at the Nietvoorbij campus.

- A maximum of ten shoots/canes per vineyard block that have randomly been cut is needed.
- Cut off the shoots/canes against the base at the old wood.
- For wine grapes only the first five buds will be analysed, except if the producers specifies the number of buds per shoot/cane he wants to be analysed.
- For raisin and table grapes that need to be cane pruned 16 buds per shoot/cane will be analysed, except if specified differently by the producer.
- For raisin and table grapes that need to be pruned with half-long bearers, 10 buds per shoot/cane will be analysed, except if specified differently by the producer. Producers must indicate that they prune half-long bearers.
- Each blocks shoots/canes must be tied separately and clearly labeled (block nr & cultivar).
- Do not send longer shoots/canes than the number of buds that need to be analysed.
- Shoots/canes can be sent to Nietvoorbij from the middle of May.
- Producers must contact the institute in advance before they send in shoots for analyses.
- Producers must supply the institute with the following details when delivering the shoots/canes for analysis; physical address, telephone-, fax- and cellphone numbers and VAT nr.
- Results of each block will be sent to producers as soon as the block’s analysis is completed.

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