

Grapevine pruning: some principles

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Pruning allows to the management of yield per vine (or per m²) by controlling the number of latent buds (i.e. winter buds which bear the inflorescence primordia).

While pruning, some basic principles need to be considered for grapevine sustainability:

1. To respect the sap flows (xylem and phloem) by positioning the pruning wounds always (and when possible) on the same side of the spurs (cordon pruning) or the canes (Guyot/cane pruning).
2. To avoid creating dead zones (desiccated cones) within the perennial organs (trunk, arms, spurs...) by avoiding cutting close to the wood (Figure 1).
3. Therefore one-two cm of wood or cane internode should be left while pruning. The consequence is the development of the buds from the crown which will require some extra work by cleaning/removing the growing shoots in spring.
4. The general aims are i) to avoid the increase of necrotic-dead wood/tissues over years; ii) to maintain the vascular system (xylem-phloem) operational.

These pruning objectives should help:

- a) To achieve more homogeneous primary shoot development & therefore homogeneous vines.
- b) To achieve a better fruit zone microclimate (depending on the vegetative expression/vigour of the vines).
- c) To avoid wood diseases (Esca, *Botryosphaeria dieback*...), which is not easy to achieve and has to be proven in the field.

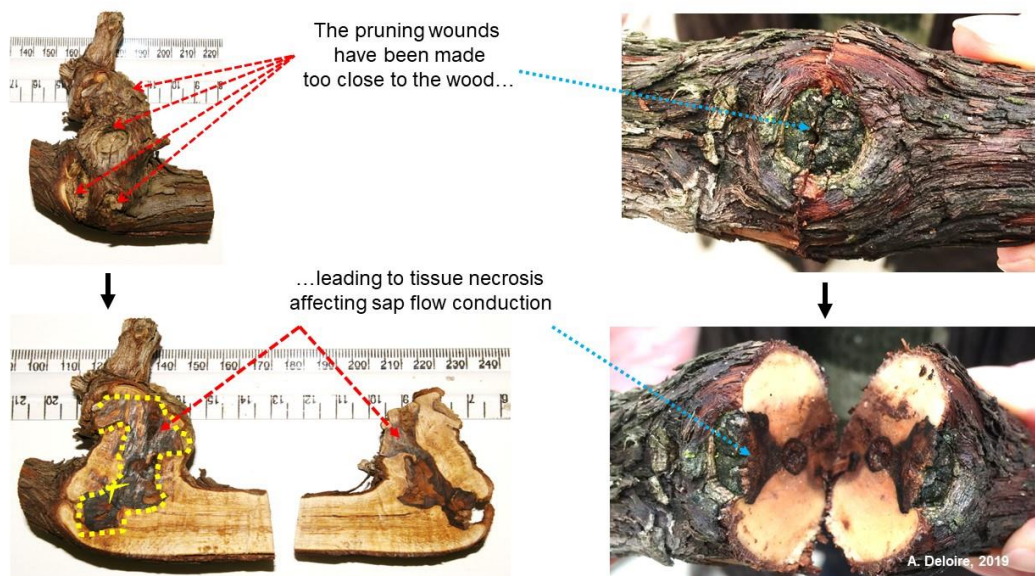


Figure 1: Example of tissue necrosis due to pruning, which could affect the xylem and phloem sap flow.

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