

A few words on grapevine acrotony and apical dominance

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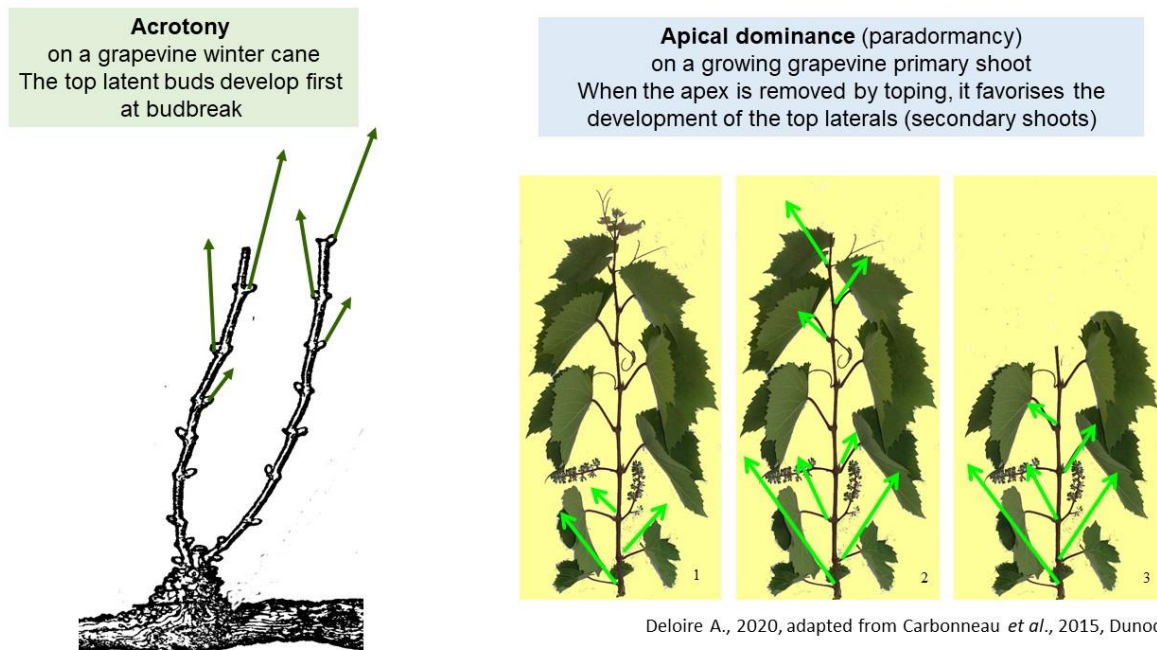
Acrotony and apical dominance are two different phenomena in grapevine (figure 1).

Acrotony means that on a vertical winter cane, the top latent buds will develop first. This leads to the inhibition of the development of the bottom buds on the cane.

Bending a winter cane allows to release acrotony. Using cane pruning, it is important to bent the canes to form an arch or to tie them up horizontally or to twist them around the wire.

Apical dominance (known as well as paradormancy for plants) is the ability of the apex, on a growing primary shoot, to inhibit the development of the buds responsible of the lateral (secondary shoots) production.

Removing the apex (terminal meristem of the primary shoot) by topping or hedging allows to release the apical dominance and will lead to the development of the top laterals if the vine water status is not limiting (i.e. vigour of the vine).



Deloire A., 2020, adapted from Carbonneau *et al.*, 2015, Dunod

Figure 1: Acrotony and apical dominance are different phenomena.