

Transnational project to preserve and develop biodiversity in Upper Rhine vineyards

Technical sheet 3

Hedges and bushes

With the advent of mechanization, the striving for more yield and easier work in the vineyard, field hedges and bushes were seen as annoying and disturbing elements in the past. They were only tolerated on a few slopes and in marginal areas and were often even removed from the vineyards entirely.

A growing ecological awareness and the realization that such trees and shrubs have positive effects in viticulture has led to a reversal in many places in recent years. Hedgerows are increasingly viewed as valuable and essential landscape elements that need to be preserved. promoted or replanted or recreated.

Why hedges are so valuable:

- Step stones in a biotope network
- Natural islands in a monotonous agricultural landscape
- Source of food for many insects and birds
- Nesting opportunities for various bird species
- Balancing effect on the water balance and microclimate in the vineyard
- Protection against erosion
- Varied and attractive landscape











Great green bush-







Planting hedges

Shrubs often develop "spontaneously" from seeds in the soil or through runners. Large hedges form from them within a few years. This type of hedge is the easiest to establish and maintain. The shrubs are adapted to the area and the local climate and are therefore naturally more hardy.

There are a few things to keep in mind:

- In the first few years, some maintenance is beneficial: watering the still young trees, re-trimming.
- Establishing a hedge requires minimal labour and material: digging planting holes, first pruning, browsing protection.
- It is urgent to ensure that the work of the winegrower in the vineyard is not hindered by the plantings.
- The row of vines in the immediate vicinity of the hedge can easily be affected by shadows cast. Likewise, it should be checked whether a cold-air stagnation would be promoted.
- Certain shrubs favour vine pests (e.g. grape berry moth, cherry vinegar fly). Here, one should switch to less critical shrubs.

The right technique

- A two-row hedge should be preferred. Staggered planting in two rows with a distance of 0.5 to 1 metre is ideal.
- The ideal planting time is between November and February. It is important not to plant during frost periods.
- The root neck of the seedling should be at ground level and the roots should be placed loosely and unpressed in the planting hole. In many vineyards, game browsing protection is strongly advised.
- Maintaining grass margins around hedges is ecologically sensible and important.
- aintenance can be done by mowing late (August to October), every second year (e.g. mowing one side of the hedge in year n and the other side in year n+1). Ideally, the mown material is removed in order to thin out the soil. This promotes flower diversity.
- Hedges must be maintained outside the bird breeding season (15 March to 31 July), ideally in November or December.
- The "selective alternating pruning" is ideal (see graphic on the right).



Choosing the right species

Before planting a hedge, it is important to select the shrub species. Certain species are unsuitable as intermediate hosts of diseases or pests.

Species that are already present in the immediate vicinity and grow well are generally suitable. It is best to ask a specialist (e.g. from the local NABU or Birdlife group) or seek advice from a good nursery.

Three interesting species are given here as examples:

Species	typical on
Rowan	lime-free, nutrient-poor soils
Hawthorn	calcareous, loamy soils
Black elderberry	nitrogen-rich, heavy soils

<< Selective alternating pruning consists of selectively cutting back certain tree species to 15 cm above the ground (= pruning).

In one year only a part of the hedge is worked (maximum one third), the next year another part and so on (= alternating).

After the 6th year a longer break in pruning is possible.

Learn more

NABU-suedbaden.de/VinBiodiv agroecologie-rhin.eu/vinbiodiv









1 Domaine de Boarmies



We gradually let the hedges grow back in place after cutting them free and limited the height of growth by removing the shoots of larger branches so as not to shade our slope too much, which has the peculiarity of facing north. Vincent et Dominique Zerr, Dangolsheim

2 Winery Zähringer



Our vineyards have large slopes which are ideal for the undisturbed development of rich flora and fauna.

The hedges usually consist of sloes, elder and hawthorn. All grow very quickly on the nutrient-rich loess loam and show a strong tendency to selfpropagate. We do not have to plant them ourselves, but pruning has to be done every now and then so that a niche-rich and thus species-rich area is preserved.

Paulin Köpfer, Heitersheim

The partners



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