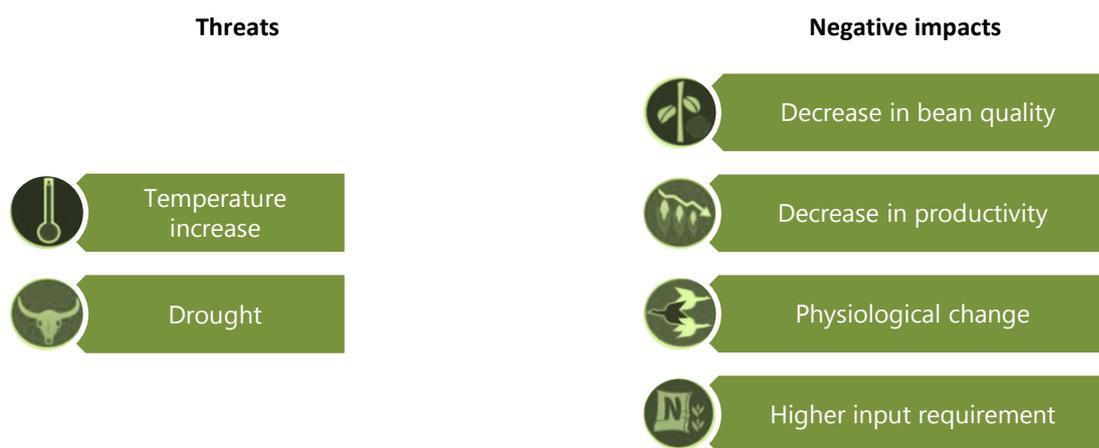


Grafting in coffee

The grafting of coffee is a practice where a rootstock is desired which has better characteristics than the commercial variety (or the coffee to be produced). In general, the most used method of grafting is the hypocotyl graft (known as Reyna in Spanish). Among the recommended rootstocks the most common is the Robusta Nemaya variety. There are other Robusta alternatives as well as varieties of the Liberica species. The main characteristics that are sought in a graft are: better root development (for a greater tolerance to droughts and improvement of the absorption of nutrients) and tolerance of pests (especially nematodes) thus generating conditions so that the coffee crop does not stop its metabolic activities such as the absorption of water and nutrients.

Climatic conditions that warrant the use of grafted varieties



Promissory species



Coffea canephora



Coffea liberica



Grafted seedlings

Implementation step by step

- 1 The seed of the rootstock (e.g. Robusta variety Nemaya) must be selected and established 7 to 14 days before (depending on the height) the scion or commercial plant. They must be established in an appropriate and disinfected medium. It is important to consider that the plant selected as a rootstock is able to adapt to the altitude where the coffee plantation will be established.
- 2 When the rootstock is in butterfly (50 to 60 days) and the scion or commercial plant in soldier (60 to 70 days) the graft should be performed (the Reyna method is recommended) and cover them in a bag. This practice should be performed by experienced and qualified personnel.
- 3 It is important to guarantee the quality of the seeds of both the rootstock and the commercial variety. The same good practices of establishment such as in a nursery (nutrition, pest and disease control, cleaning, etc.) must be carried out.

The comparisons of plots established with grafted plants have better root systems (both in width and in length) and a better vegetative development. There is an increase in the cost of production per plant however it is compensated by the results in the quality of the grafted plants.