Good Agricultural Practices

SMS Sustainable Management Services, Nicaragua.
Marsellesa + Hybrid H1 grafted onto Robusta

SMS has supported coffee variety improvements for 2 objectives:
1. to increase coffee plant resistance to pests and diseases
2. to adapt groves to cope with climate change.

These involve grafting Marsellesa and H1 Hybrid material onto Robusta coffee rootstock, resulting in increased root mass, with two benefits:

- enables the coffee bush to adapt better to current day [warmer] temperatures
- avoids use of nematicides due to higher percentage of roots [than traditional Arabica varieties]

Around 200 coffee farms are now planting these improved cultivars to maintain their productivity and avoid excessive use of agrochemicals
Nursery of Marsellesa grafted onto Robusta.
Marsellessa bushes planted in alternate rows with Brachiaria grass
Brachiaria grass benefits

- Easy to control
- Good production of green mass (average 4 tons per ha)
- High Carbon to Nitrogen ratio
- Species with mycorriza
- Secuesters carbon
- Recycles silica
- Reduces temperature by at least 4-5°C
- Low pest incidence
- Low disease incidence
- No herbicides needed
Use and benefits of the Ecoweeder

Equipment designed to apply systemic herbicides (e.g. glyphosate) while minimising:

- risk of harm to the crop
- operator exposure
- environmental contamination

Advantages compared with conventional herbicide application

☑ Applies herbicide only to weedy species which you want to eliminate
☑ Selective action, i.e. accidental application to coffee foliage is avoided
☑ Enables farmer to select and maintain living cover crops
☑ Uses less than half normal volume of herbicide
Thanks for your attention