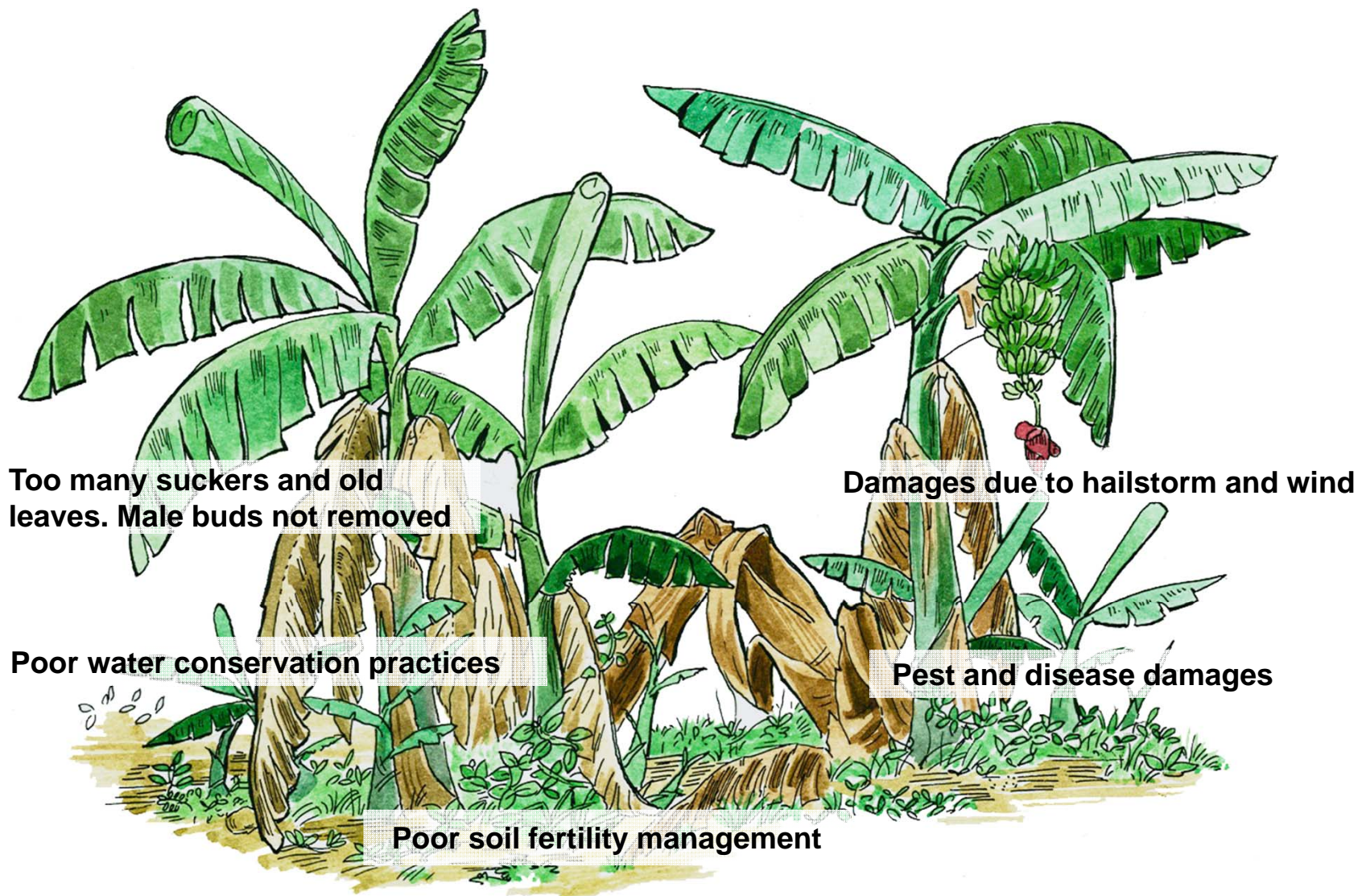


Poor banana production practices



Too many suckers and old leaves. Male buds not removed

Damages due to hailstorm and wind

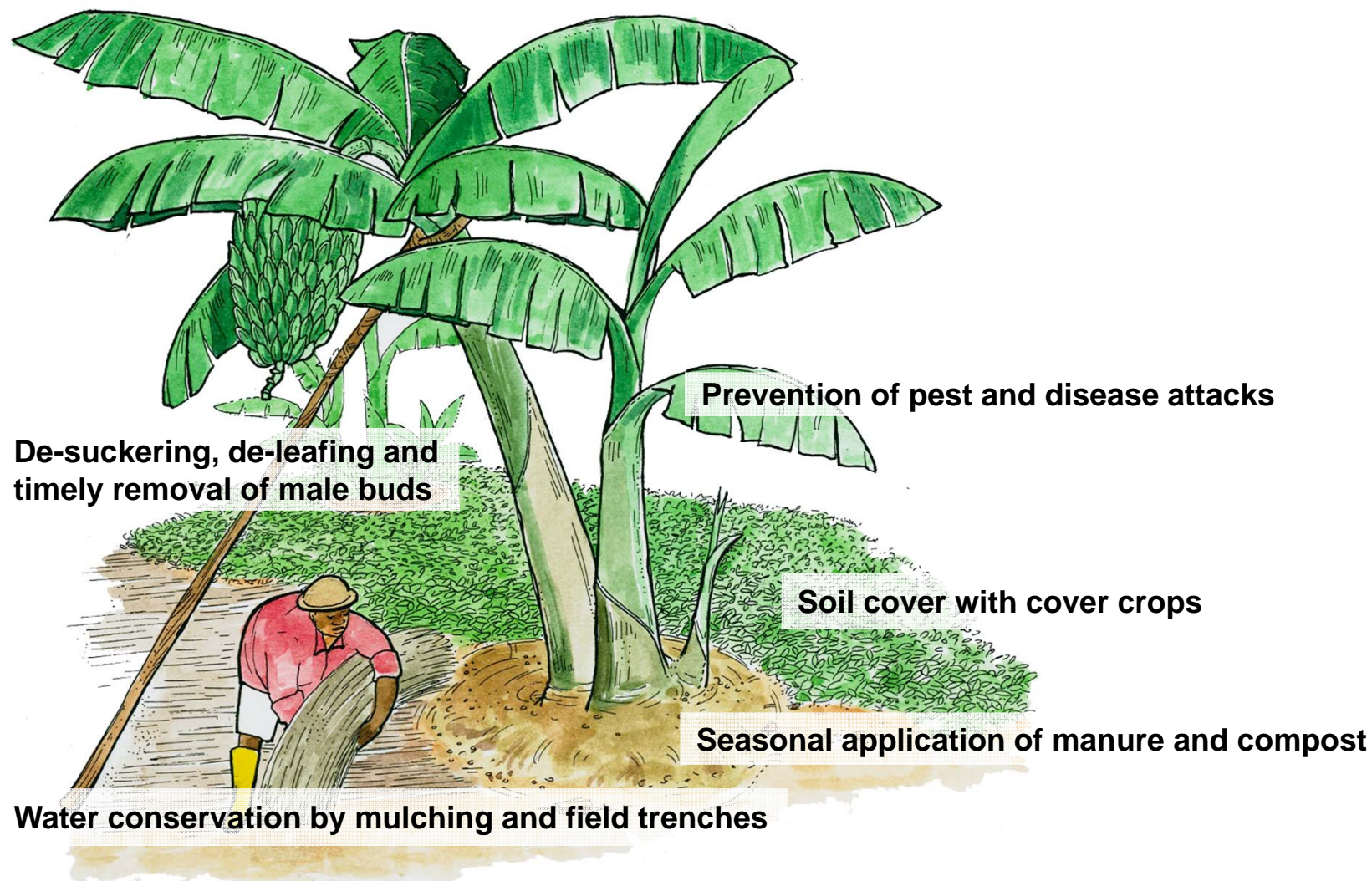
Poor water conservation practices

Pest and disease damages

Poor soil fertility management



Improved banana production practices



Preparing suckers for planting (corm pairing)



1. Remove all leaves, outer leaf sheaths and roots and trim off part of the corm to eliminate weevils, weevil eggs and nematodes.



2. Remove any brown and black spots that may appear on the corms until only white corm tissue remains.



Hot water treatment of suckers



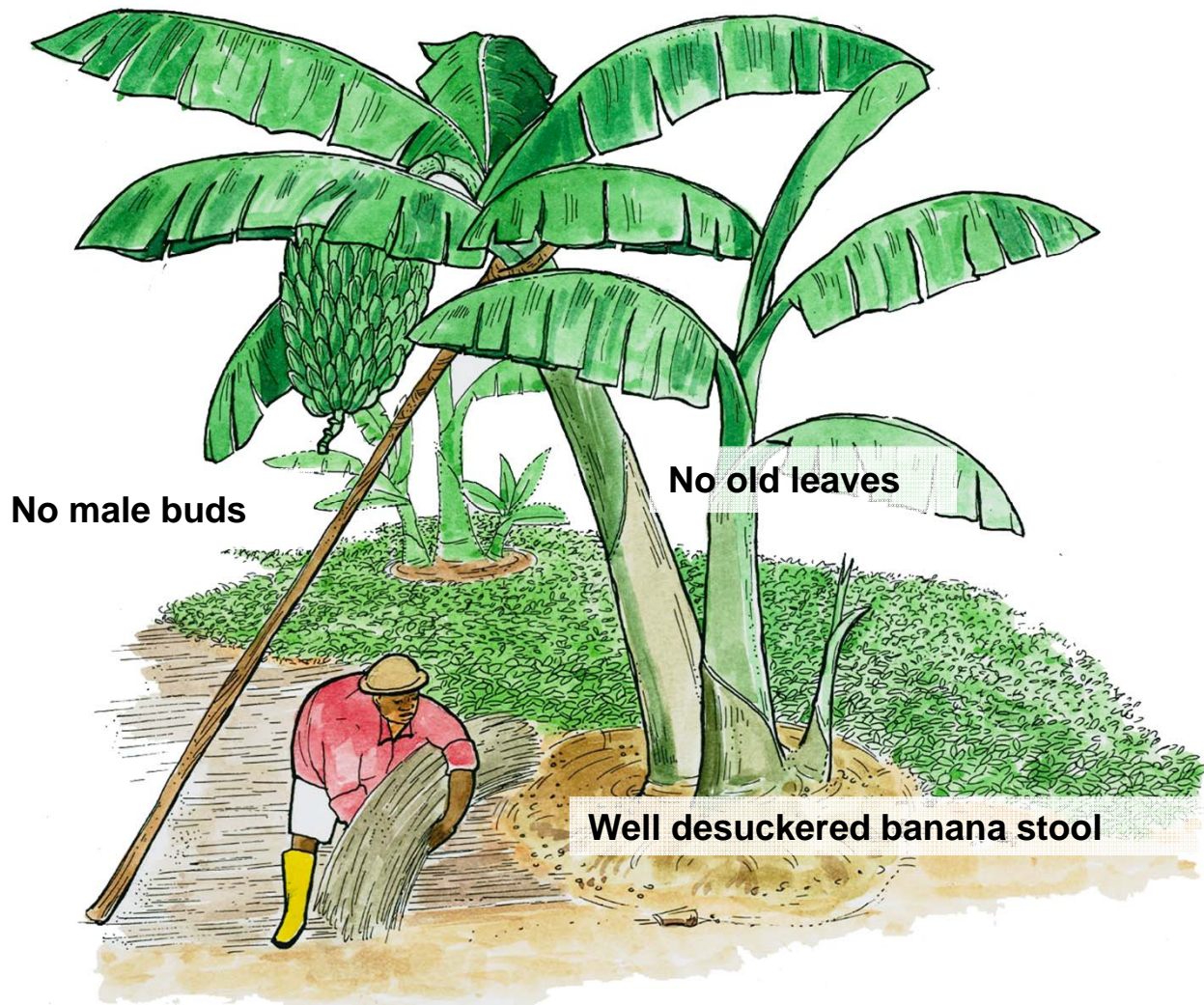
1. Boil water.



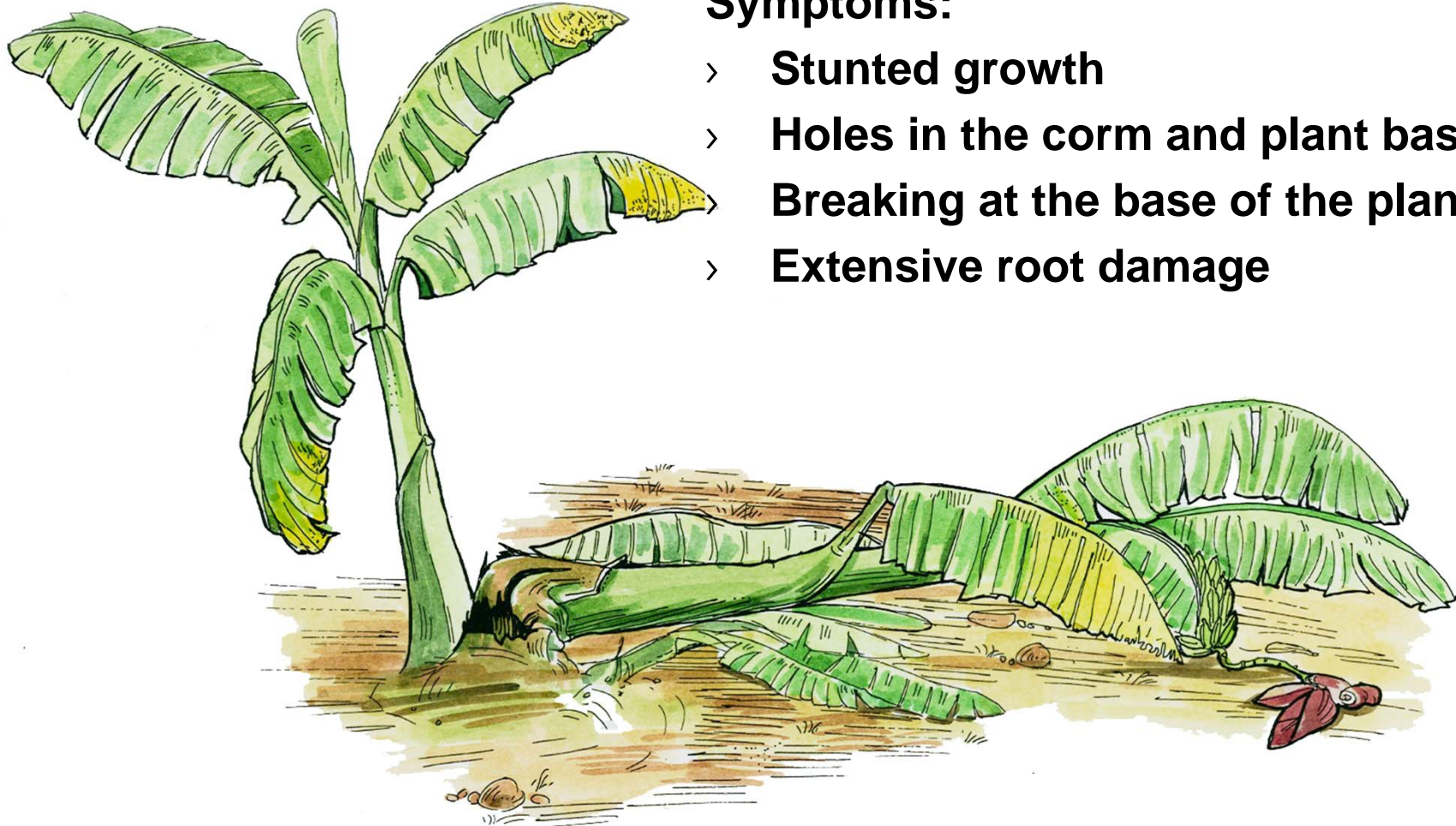
2. Mix same amount of boiling water and normal cold water. Soak the base of the plant in the hot water (60°C) for about 10 minutes. This will kill all nematodes.



Routine management practices



Banana weevil damage



Symptoms:

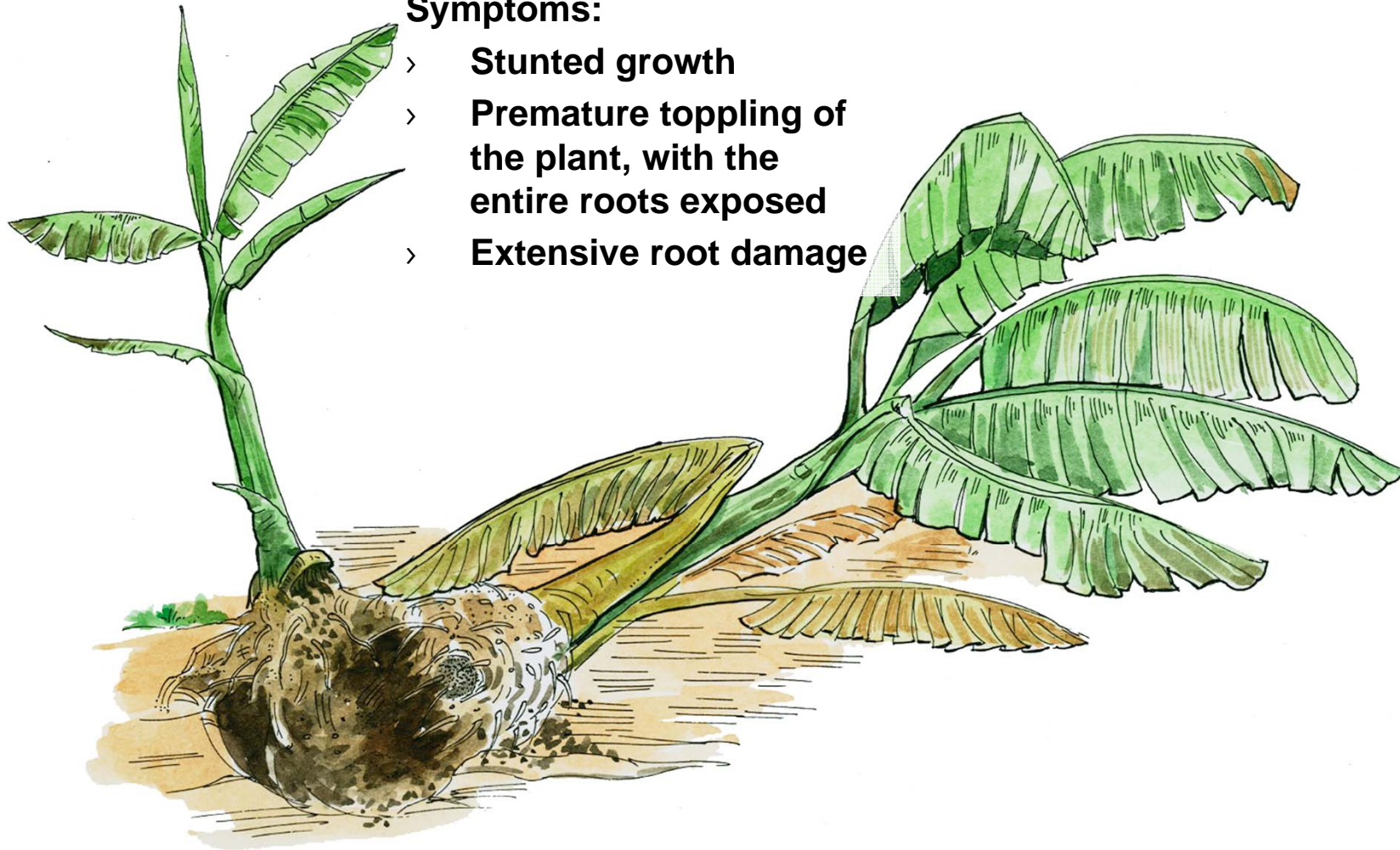
- › Stunted growth
- › Holes in the corm and plant base
- › Breaking at the base of the plant
- › Extensive root damage



Nematode damage

Symptoms:

- › Stunted growth
- › Premature toppling of the plant, with the entire roots exposed
- › Extensive root damage



How to manage nematode and weevil damage



1. Use clean planting materials for establishing new gardens



2. Add compost in planting holes, top-dress with organic manures and mulch with organic materials



3. Clean tools and shoes or feet before entering a healthy garden.



4. Heavily infested gardens should be cut down and planted with another crop



Bacterial wilt damage

Symptoms:

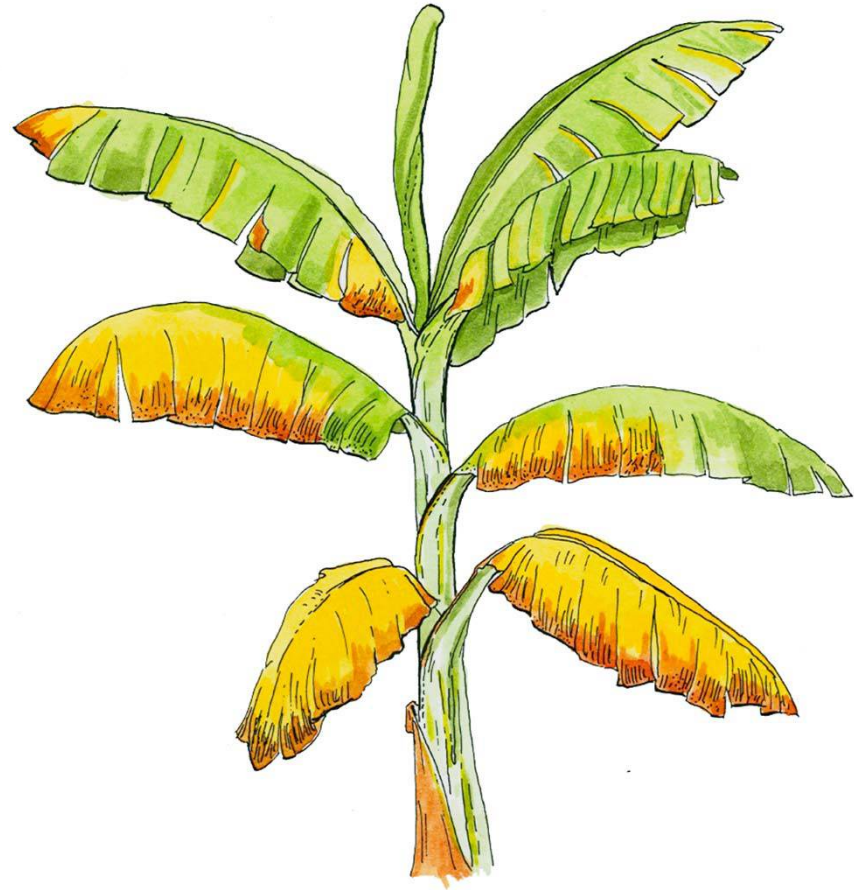
- › Yellowing of leaves
- › Premature ripening of the banana bunch
- › The male bud dries prematurely
- › A pus-like liquid flows when the stem is cut
- › Eventually the plant dies



Fusarium wilt damage

Symptoms:

- › **Yellowing of leaves**
- › **Leaves eventually collapse**
- › **Discoloured vessels of the pseudostem**
- › **Eventually the plant dies**



Management of bacterial & fusarium wilt diseases



1. Remove all male buds as soon as the bunch forms in case of bacterial wilt



2. Cut any plant when showing first symptoms



3. Heap the plants to rot or burn, to limit the spread of the disease



4. Disinfect all tools



5. Replant new banana after at least 2 years using clean planting materials



Black Sigatoka

Symptoms:

- › **Discolouration and leaf necrosis**
- › **Poor fruit formation and small finger**
- › **Reduced yields**



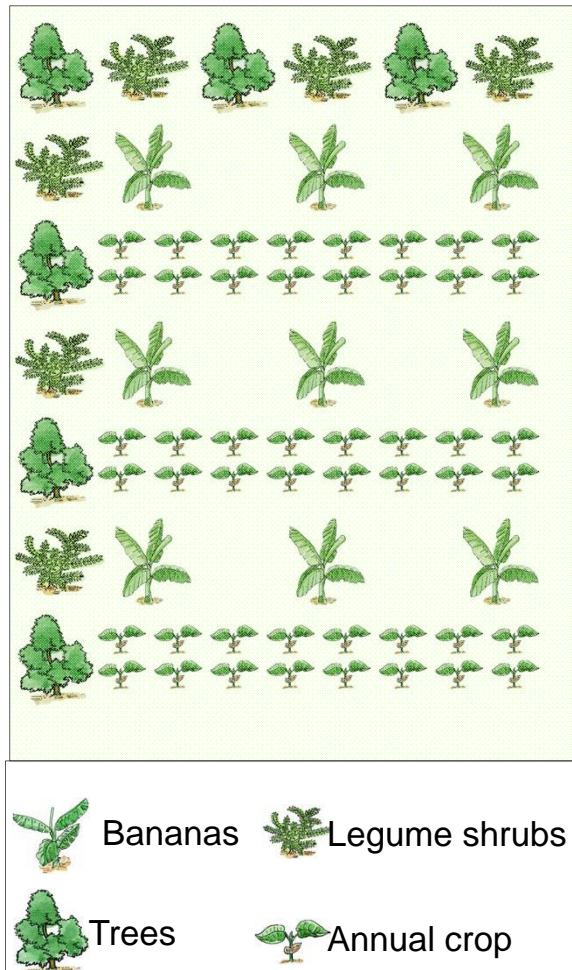
Control:

- › **Maintain proper spacing**
- › **Remove old leaves and mulch them in non-banana gardens**
- › **Improve soil fertility**

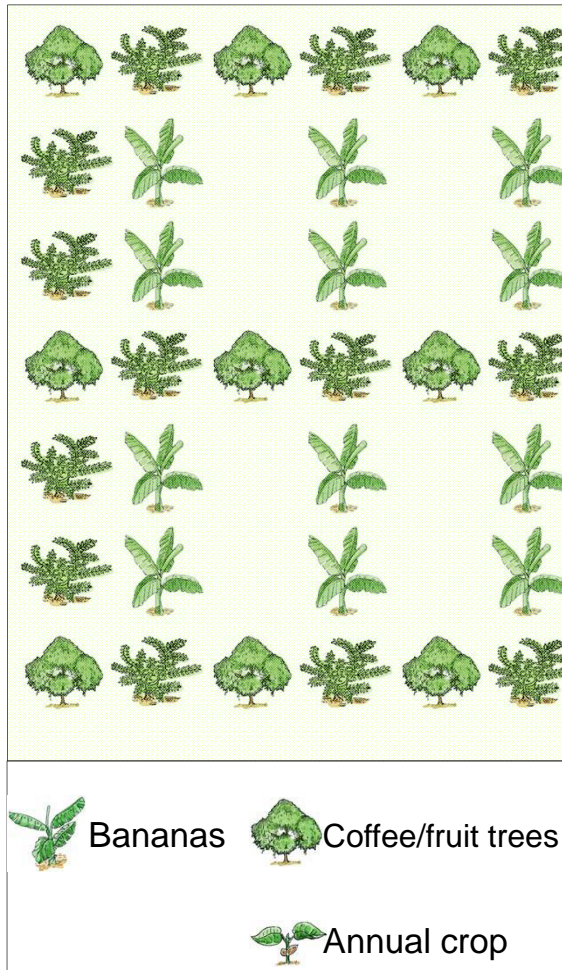


Arrangement of bananas and intercrops

1. Less bananas/annual crops



2. More bananas/perennial crops



3. Banana/legume shrubs



Banana agroforestry (multistorey) system



Water conservation trenches in a banana plantation



How to improve soil fertility



Add compost to the planting hole



Regularly apply compost and grow cover crops



Apply mulch or grow a cover crop



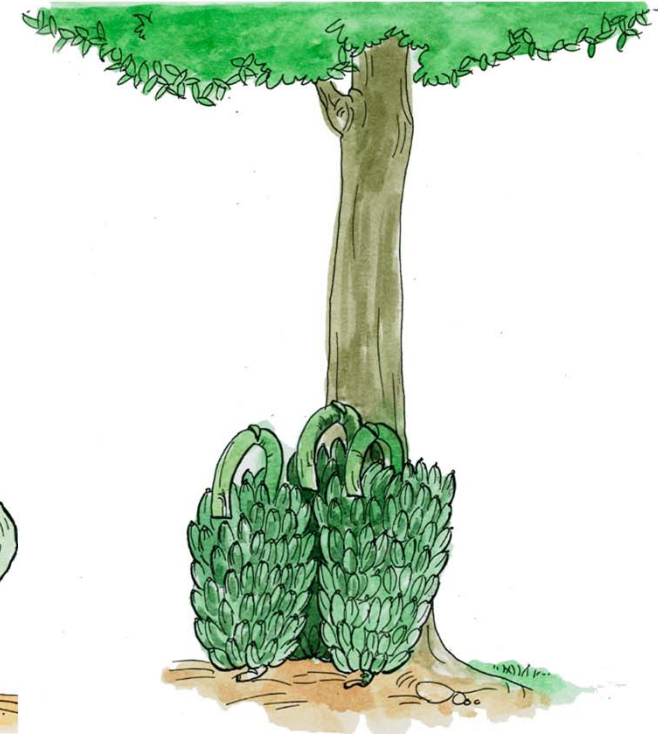
Proper post harvest handling of banana



Take care that the bunches do not fall to the ground



Handle harvested bananas with care



Harvested bunches should be kept under the shade and should not be heaped together



Certification of organic banana production

Delete this transparency

