The Basics of a **Maize-Legume Intercropping**

Intercropping involves growing two or more crops in the same field at the same time. For this to work, crops grown as intercrops should have different growth habits, canopy structure and rooting patterns. For example, maize can be intercropped with faba bean, kidney bean, cowpea and groundnuts.

Benefits of intercropping

1. Diversified crop production, as maize and legumes are grown on the same piece of land in one growing season.
2. Intercropping reduces the risk of crop failure. Each crop species grown in an intercrop has a different level of susceptibility to dry spells, drought, and pests and diseases.
3. High cereal and legume yields when compatible crop species are intercropped.
4. Improved soil fertility when grain legumes are grown as intercrops.
5. Reduced soil erosion, as more crop canopy protects the soil from rain and wind erosion.
6. Income, food and livestock feed can be generated simultaneously in an intercropping system.

What arrangement of intercrops are recommended?

Alternating rows of component crops, that is, one row of maize followed by one row of the legume.

Two rows of legume sandwiched between rows of maize.

Alternate positions of maize and legume in the same row.

Maize and legume in the same planting station.

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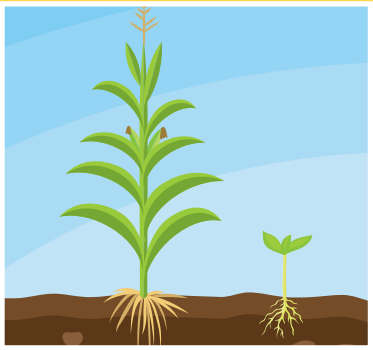
Tips when intercropping



1. Select crops that can grow together, that is, crops with different growth habits, canopy structures, and rooting patterns.

2. Be careful when selecting sowing and/or seeding rates of component crops. Seeding rates depend on soil type, available soil moisture and production objectives (for example, food or feed, or income generation).

3. Carefully select the planting dates for the different component crops based on their growth habits and cycles.

4. When using chemical weed control, select herbicides that are compatible with all component crops.

5. Basal fertilizer can be applied to both maize and legume crops. Topdressing is applied to maize only.

When is the best time to plant cereal and legume crops in an intercrop system?

In an intercropping system, cereals and legumes can be planted on the same day, or on different dates.

Planting on the same day may affect plant population or density of the component crops. However, when compatible component crops are selected, no negative effects on crop growth and yield are experienced.

With relay planting, or planting on different days, the cereal is often planted first, and the legume up to six weeks later.

For further information,
contact your nearest Development Agent (DA) at the Woreda Agriculture Office