

Propagation of Tithonia

You can easily propagate tithonia by direct seeding. The best method is to make a furrow for the seeds and cover them lightly with sandy soil. Then apply mulch to prevent the seeds from being washed away and to retain the soil moisture.

You can also establish tithonia from cuttings. For successful propagation, make cuttings 20-30 cm long from mature wood and place them in the soil the right way up. Avoid split cuttings, as they do not sprout. Plant the cuttings with 1 or 2 nodes below ground level and 2 or more nodes above. Place the cuttings in the ground slanting at an angle of 45-60 degrees.

IMPROVE SOIL PRODUCTIVITY WITH TITHONIA



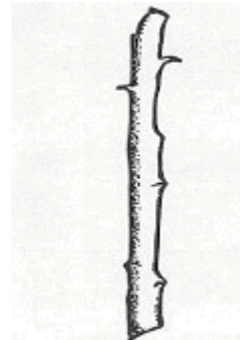
Make a shallow furrow



Plant the seeds



Select a mature stem



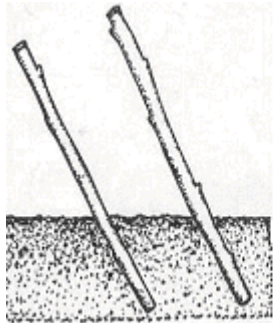
Cut a piece with
4 or 5 nodes



Cover with sandy soil



Apply a mulch



Plant at an angle of
45° - 60°



Water the cuttings



What is tithonia?

Tithonia is a quick growing and soft shrub. It grows to a height of 1-3 metres and bears alternately positioned leaves along most of the stem. The flower of tithonia is about 3 cm in diameter and has yellow petals. Each mature stem may bear several flowers at the top of the branches. The lightweight seeds can easily be dispersed by wind, water and animals.

Habitat of tithonia:

Initially introduced into the region from Central America as an ornamental plant, it escaped from cultivation and now grows wild in hedges, along roadsides and on wasteland throughout the humid and sub-humid tropics at between 1000-2000 masl.

Brochure adopted from 'Using the wild sunflower, Tithonia, in Kenya' (ICRAF 1997)

Uses of tithonia:

To apply tithonia, cut leaves and soft twigs of tithonia from the hedges, chop them into small pieces, and either place them in each planting hole or spread them evenly over the surface and then incorporate them into the soil.

You can continue applying this green manure throughout the active growing period of the crop either by placing it along the rows of plants or by incorporating it into the soil.

After you apply the leaves, they must be mixed well with the soil or left to decompose for at least 1 week before you plant. The maize and other seeds may not germinate well if they are planted immediately.

Note:

Tithonia is not a legume so it does not fix nitrogen. Where Tithonia is grown and used on-farm the use of tithonia cycles nutrients within the farm but does not supply a net input of nutrients to the farm.

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Recommendations for tithonia:

- Tithonia diversifolia can be applied as green manure to maize, sorghum, cowpeas, kale, tomatoes and beans as well as to high-value crops such as french beans and pineapples.
- For efficient use of labour, it is recommended that farmers should plant tithonia in different niches on their farm by direct seeding or by using cuttings or bare-root seedlings. This will make tithonia available within the farm.
- Tithonia can be cut back twice a year i.e. at the start of each season.
- Tithonia can be planted on contours as hedges for soil and water conservation.
- Water extracts from tithonia can be used to control termites and insect pests.
- Farmers can be encouraged to use a combination of tithonia with inorganic sources of P (TSP or DAP or rock phosphate) or other organic sources such as animal manure.