

Fertiliser application of cashew

Recognize the problem

Many farmers take cashew as an "orphan crop" (neglected crop) and do not fertilise it, despite its high nutritional and commercial value. Fertilisation of the crop is important despite the general belief that the crop can thrive well even without fertilisation. Nutrient deficiency symptoms include stunted growth, purpling of leaves and yellowing of lower leaves.

Iron deficiency results in leaves turning yellow (apart from the midrib) and black spots on the leaves, which can be mistaken for fungal attack. Zinc deficiency causes reduced size of leaves and poor growth of seedlings.

Failure to apply fertiliser will lead to low yields. It will make the crop more susceptible to different diseases such as inflorescence blight, which is capable of causing up to 45% yield loss.

Healthy cashew fruits. (Photo by Abhisheek Jacob, CC BY-SA)



Background

Nutrient deficiency is common in sandy soils of the western part of the country where cashews is grown. Cashew plants need nutrients for good growth, root development and fruit formation. It is therefore important to supply compound fertilisers such as **compound D** and **single super phosphate**. **Urea** or **ammonium nitrate** will also supply nitrogen that promotes vegetative growth. A good fertilization regime will boost the plant vigour, increase yields and helps the crop withstand disease attack. Application of adequate fertilisers can increase yields by up to 15kg of nuts per tree.

Potassium deficiency in Cashew. (Photo by Rob Mikkelsen)



Management

- Apply annually 150 to 200kg/ha of **Single Super Phosphate** (15 to 20 grams per sq metre)
- Apply annually 120kg/ ha **urea** to the soil (10 to 15 grams per sq metre)
- Apply annually 50kg/ ha **Muriate of Potash** (5 grams per sq metre)
- Although fertilisation can be done once so as to reduce labour costs, split application is better to maximise the uptake of nutrients by the plant.
 - First, apply half of the fertiliser before the rains
 - Second, apply another half of fertilizer after the first rains
- In addition, apply 10-15kg **farm yard manure** to each tree per year
- On seedlings, apply one spray of an aqueous 0.1% solution of **Zinc sulfate heptahydrate** to the seedlings leaves
- Apply 1 teaspoon of **iron chelates** diluted in 10 litres of water once by drenching to about 25 seedlings of cashew

Scientific name(s) > **Nutrient deficiency; Lasiodiplodia theobromae**

The recommendations in this factsheet are relevant to: Zambia



Authors: Mathews Matimelo
Zambia Agricultural Research Institute ZARI of Ministry of Agic. & Livestock
tel: +260977601065 email: yamiko2006@yahoo.com

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