ILLUSTRATED POSTER - VOACANGA

ASNAPP
Agribusiness in Sustainable Natural African Plant Products

Bad Practices

1. Site Selection for Nursery

Water logged area

Easy access to stray animals

2. Nursery Bed Preparation

- No sterilization of bed
- Uneven bed surface
- Poorly drained bed
- Poor bed soil (Clay or gravel)
- Unloosened bed

3. Raising Seedlings and Nursery Management

Unshaded nursery
Weak structure

Weed growth
Insect infestation
High disease occurrence
Retarded growth
Unhealthy seedlings

4. Land preparation

Improper layout
No shade provision
Uncleared bush before transplanting

5. Transplanting

Transplanting
- Unhealthy and diseased seedlings
- In hot weather
- Without Regular Watering
- Too deep in a hole

6. Fertilizer application

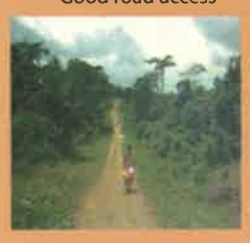
Using unrecommended fertilizer type
Not adhering to fertigation regimes

Activity/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raising Seedlings	■	■	■	■	■			■	■	■	■	■
Transplanting					■	■	■	■	■	■	■	■
Cultural Practices	■	■	■	■	■	■	■	■	■	■	■	■
Harvesting	■	■	■	■	■	■	■	■	■	■	■	■
Post Harvest Practices	■	■	■	■	■	■	■	■	■	■	■	■

Good Practices

1. Site Selection for Nursery

Good road access



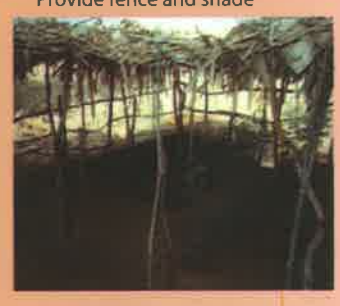
Well drained soil

- Perennial source of water
- Fairly flat with a gentle slope to allow water to run off
- Partial shade is needed
- Fence around the perimeter to keep out animals/people.

2. Nursery Construction and bed preparation

Prepare raised beds

Provide fence and shade



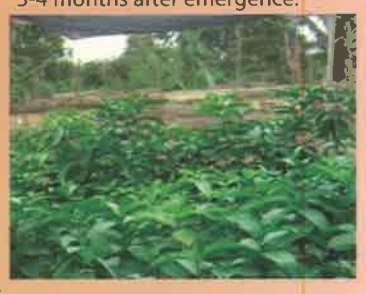
- Loosen soil
- Cover with transparent plastic to sterilize the soil
- Ensure gentle slope to allow drainage

3. Raising seedlings

Sow seeds in rows and cover bed with mulch

Remove mulch as soon as seeds begin to germinate abut maintain overhead shade. Prick out unto other beds or polypropylene bags to prevent overcrowding

Seedlings emerge after 3 weeks and can be transplanted between 3-4 months after emergence.



4. Land Preparation

Slash and clear weeds
Remove stumps and harrow if possible

5. Transplanting

Transplant thick , healthy and short seedlings (4-6 leaf stage)
Transplant at 7mX7m or 6mX6m
Transplant late afternoon or early morning
Water right after transplanting

6. Fertilizer Application

Apply decomposed cow dung/poultry manure where soil has been cropped before (2.5tons/ha). Minimize the use of inorganic fertilizer.

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Farm Maintenance / Cultural Practices and Harvesting & Post Harvest Practices

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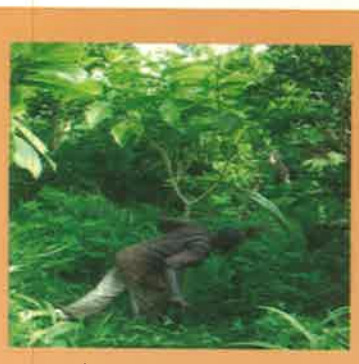
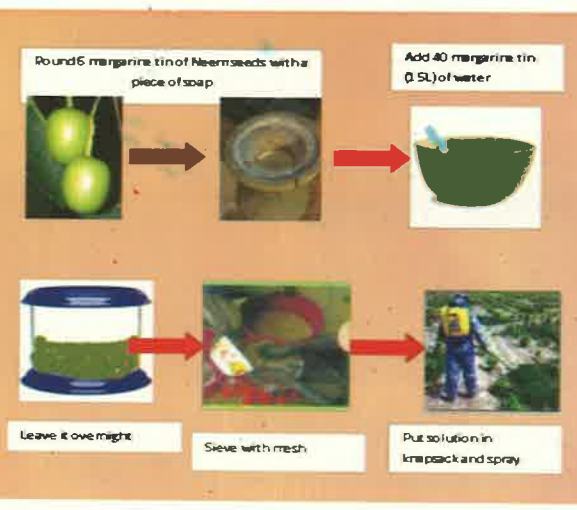
7. Pest and Disease Control



- Weed regularly
- Apply natural pesticides like neem tree extracts
- Minimum application of inorganic pesticides
- Use IPM

Apply Karate or any appropriate insecticide where necessary

Insect infestation



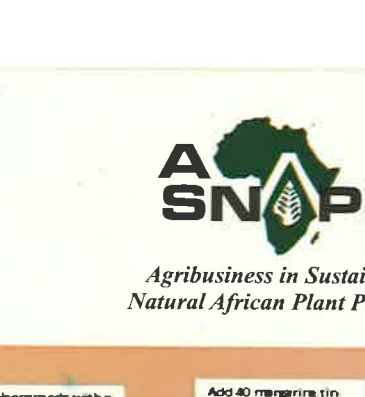
8. Harvest

Flowering plant

Matured fruit

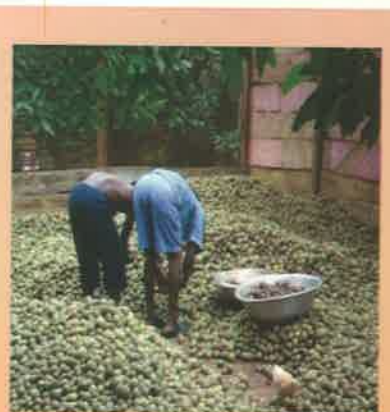
Immature fruit

Harvest from July ending
Keep harvested fruits under shade to crack open

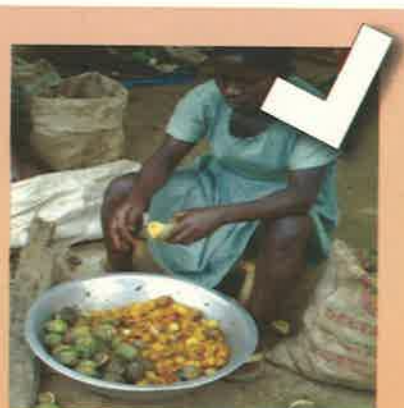


Do not cut down tree/branches when harvesting

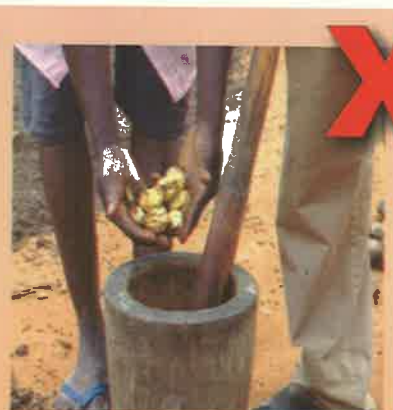
9. Post harvest Practices



Allow pods to crack open



Extract seeds from pods

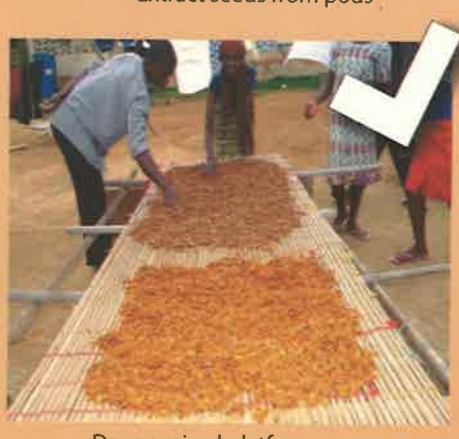


Do not pound the fruits

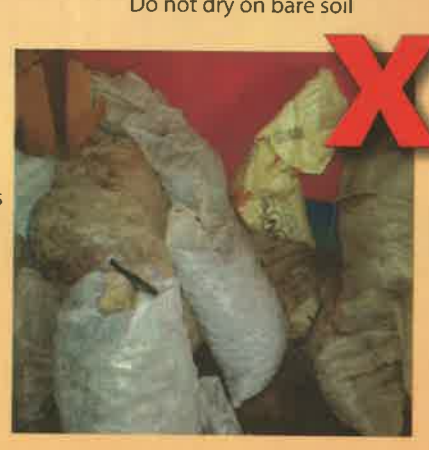
Do not use rotten seeds

Do not dry on bare soil

Harvest mature cracked or about to crack pods
Extract mature yellowish brown seeds from pods.
Dry on raised platform.
Stir frequently to ensure uniform, drying.
Sort seeds/fruits into grades
Pack in clean polypropylene or jute sacks
Store on pallets in an airy room
Avoid contact with water or moisture



Dry on raised platform



Grades

Store in Jute sacks and on pallets

Dan Acquaye[1], Juliana Asante-Dartey[1], Prof. Jim Simon[2], Rodolfo Juliani[2], Prof. Charles Quansah[3], Dr. Richard Akromah[3], Dr. Eric Asare[3], Larry Amekuse[1], Akua Benewaah[1], Joseph Agyiri[1] and Steve Boadu[1] .

1. Agribusiness for Sustainable African Plant Products Program (ASNAPP-Ghana), Accra, Ghana. 2. Rutgers University, New Jersey, USA. 3. Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana

Contact: asnapp-gh@asnapp.org.gh, asnappwest@yahoo.com www.asnapp.org +233-302-505617

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VOACANGA AFRICANA

ILLUSTRATED QUALITY STANDARDS

MINIMAL QUALITY REQUIREMENTS

THE SEED MUST BE:

- clean, have no clusters and orange to brown in colour;
- dry (max 10% m/m moisture content) and reasonably uniform in colour;
- of characteristic taste and have odour of variety;
- free from insecticides and pesticides;
- free from foreign matter (twigs, leaves, etc.), rancid odour, mould and mustiness;
- free from insect infestation, mites, insect fragments, excrement and animal contamination;
- free from adulteration (sand, gravel, etc.).

MATURITY

Matured pod shows cracking along the cleavage line.

FULLY MATURED
Fully matured pod with soft orange seeds

MATURED
Matured pod with soft yellow seeds

IMMATURED
No cracking on cleavage line; seeds hard and beige in colour

SHRIVELLED/HOLLOW SEED
Seed is shrivelled/hollow due to immaturity

COLOUR

Seeds must be orange to brown in colour when dried. The seeds must show uniformity in colour.

SEED COLOUR
Orange to brown seeds when dried

BLACK SEED

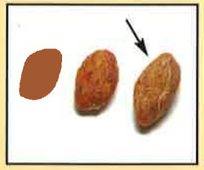
COLOUR UNIFORMITY
Seeds must show uniformity in colour

MIXED COLOURS

BLACK SEEDS

SIZE

Larger seeds are preferable.



SMALL, MEDIUM, LARGE SEEDS

POST-HARVEST PROCEDURE

Seeds must be free from extraneous/ foreign matter.

CLEAN SEEDS

FOREIGN MATTER
Seeds with foreign matter

CLUSTER
Cluster of seeds

Seeds must be clean, whole and of the same colour.

WHOLE SEED

SKINNED SEED

BROKEN SEED

MECHANICALLY DAMAGED SEED

MIXTURE OF SEEDS

DISEASES

Seeds must be free from decay, insect infestation, excrement and animal contamination.

DECAY/MOULD
Seeds show mould filaments and visible signs of rotting

INSECT INFESTATION
Presence of live or dead insects

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