



MPOB Code of Good Nursery Practice for Oil Palm Nurseries

By

Zulkifli Abd.Manaf

Idris Omar



CONTENT

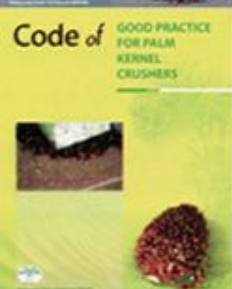
1. INTRODUCTION
2. SCOPE
3. DEFINITIONS
4. REQUIREMENTS
5. LEGAL REQUIREMENTS



1. INTRODUCTION

- The productivity of an oil palm plantation depends on many factors
- Most important – quality oil palm seedlings that very much dependent on good nursery management and practices
- CoP Nursery provides guidelines to nursery operators for producing high quality oil palm seedlings





2. SCOPE

- Guidelines on management and practices for operating an oil palm nursery
- Seedling production – from planting of the DxP oil palm germinated seeds to raising the seedlings until the stage at which they are ready for field planting

3. DEFINITIONS

- Germinated Seed
- Pre-nursery
- Main Nursery
- Polybag
- Growing Medium
- Abnormal Seedling
- Culling
- Pests
- Integrated Pest Management (IPM)
- Competent Agriculturists



4. REQUIREMENTS

4.1 TRACEABILITY

- ✓ The oil palm seedlings produced shall be traceable to a registered or licensed seed producer

4.2 MPOB ACT AND ITS SUBSIDIARIES

- ✓ Adhere to the Malaysian Palm Oil Board Act 1998 and its subsidiaries



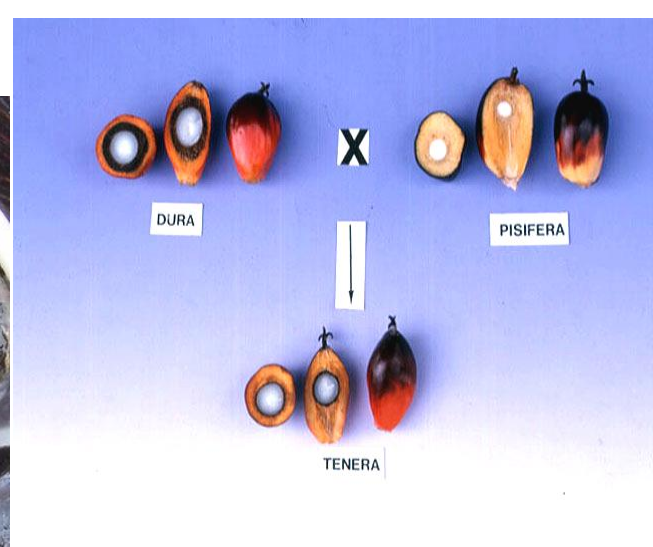
4.3 GERMINATED SEED

- ✓ Purchased from or supplied by licensed oil palm seed producers authorised by MPOB
- ✓ Checked to ensure in good condition and free from any diseases
- ✓ Defects and damaged seeds should be removed
- ✓ Plant as soon as possible after delivery





Germinated seed



4.4 NURSERY SITE SELECTION

- ✓ Not prone to flooding or water-logging
- ✓ Open area clear of shade
- ✓ Level or on a gentle slope
- ✓ Near to a water source
- ✓ Near to sources of good soil for polybags filling
- ✓ Accessible by motorized vehicles





4.5 SITE PREPARATION

- ✓ Cleared and cleaned
- ✓ Ploughed and harrowed, remove roots and plant debris
- ✓ Adequate drainage system
- ✓ Sufficient access roads and working paths
- ✓ Protected by fencing



adequate drainage system

4.6 GROWING MEDIUM

- ✓ Have good water-holding capacity and aeration
- ✓ High quality top soil, suitable soil mixture
- ✓ Free from debris, stones, refuse, sticks, roots and large clods (>1 cm diameter)
- ✓ Free from disease inocula that will affect the growth of the oil palm seedlings



4.7 IRRIGATION

- ✓ Clean water (pH > 4.0)
- ✓ Capable of supplying sufficient water
- ✓ Settling pond, filtration equipment, water pump
- ✓ Appropriate watering system
- ✓ Test runs of irrigation systems prior transplanting





settling pond, suitable filtration equipment and a water pump system should be installed



All seedlings shall receive continuous and sufficient supply of clean water

4.8 STORAGE AND SAFETY

- ✓ Storeroom to keep chemicals and equipment
- ✓ All chemicals, fertilizers shall be labeled and stored separately
- ✓ Spray containers for herbicides shall be labeled “HERBICIDES ONLY” and be used strictly for herbicides only
- ✓ A clean water source shall be made available for workers
- ✓ Operators should be equipped with suitable protective clothing and appropriate equipment
- ✓ Follow the Occupational Safety and Health Act 1994 (Act 514) and Regulations and Orders
- ✓ Use only chemicals that are registered under the Pesticides Act 1974 (Act 149) and Regulations, and the Food Act 1983 (Act 281)





Operators should be equipped with suitable protective clothing

NURSERY TYPES

Single-stage nursery

- **MAIN NURSERY**

or

Double-stage nursery

- **PRE NURSERY**
- **MAIN NURSERY**



MAIN NURSERY



PRE-NURSERY

4.9 NURSERY MANAGEMENT AND PRACTICES

4.9.1 Pre-nursery with Seedling Age below 4 Months (120 Days)

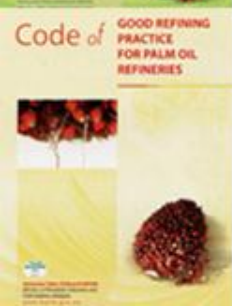
- ✓ Type of polybag
- ✓ Filling of polybags
- ✓ Arrangement of polybags
- ✓ Planting the germinated seeds
- ✓ Watering
- ✓ Fertilizer
- ✓ Weed control



4.9.2 Main Nursery with Seedling Age below 14 Months (425 Days)

- ✓ Type of polybag
- ✓ Filling of polybags
- ✓ Arrangement of polybags
- ✓ Planting/ transplanting
- ✓ Number of seedlings
- ✓ Watering
- ✓ Fertilizer
- ✓ Weed control





4.9.3 Pest and Disease Control

- ✓ Wherever possible, a good integrated pest management plan should be adhered to according to need
- ✓ Seek advice on pesticide and fungicide application from a competent agriculturist / entomologist

4.9.4 Culling

- ✓ Culling of abnormal seedlings prior to transplanting into the field
- ✓ Seedlings below 4 months - twisted shoot, “grass” or narrow leaves, rolled leaves, collante, crinkled leaves and chimaera” (variegated) symptoms shall be culled
- ✓ Seedlings below 12 months - runts or are stunted, barren or erect with an upright rigid appearance, have a flat top, limp, look juvenile, have short internodes, wide internodes, narrow pinnae, acute pinnae insertion, short broad pinnae, chimaera, or any other abnormalities shall be culled
- ✓ Culled seedlings shall be destroyed by slashing with a sharp blade such as a ‘*parang*’



Culled seedlings shall be destroyed by slashing with a sharp blade such as a '*parang*'.



4.9.5

Seedling Dispatch

- ✓ Seedlings that are normal, healthy, and of the right age shall be dispatched for field planting
- ✓ Watered prior to being rotated 180° from its original position one month before transferring them for field planting
- ✓ Watered before dispatching them for field planting
- ✓ Carefully handled when loading them into transporting vehicles



4.9.6 Advanced Planting Materials (APM) as Supply Palms

- ✓ Seedling age
- ✓ Type of polybag
- ✓ Arrangement of polybags
- ✓ Fertilizer
- ✓ Weed control
- ✓ Pest and disease control





4.9.7 Record Keeping and Labeling

- ✓ To keep up-to-date daily records and monthly statements
- ✓ Batch or block of seedlings shall be clearly labeled with plot number, name of progeny, numbers of seedlings and dates of sowing and transplanting
- ✓ A sign board carrying information on the name of the licensee, licence number, address and telephone numbers shall be placed at the premises licensed by MPOB

5. LEGAL REQUIREMENTS

All oil palm nursery activities and products shall in all aspects comply with the requirements of the legislations currently in force in Malaysia



CONCLUSION

- This code of practice gives emphasis to the practices and procedures for operating an oil palm nursery
- Oil palm nursery operators should be familiar with all the relevant and applicable recommendations given in this code, and should practice them on a daily basis in addition to their current routine, without compromising the quality of the seedlings prepared for field planting





THANK YOU