

GROWING LEAF MUSTARD IN THE LOWLANDS

Introduction

Brassica juncea (L.) Czernjaew, commonly called Indian mustard, is locally known as 'sawi pahit'. It belongs to the Brassicaceae family and is believed to be originated from Central Asia. Two types of mustards have evolved, the oilseed and the vegetable mustard. In South-East Asia, leaf mustard is widely cultivated.

Leaf mustard is an important leafy vegetables in our local market. This vegetable is consumed in various ways such as fresh green in stir fry, pickled or in brine. It has a unique flavour and a pungent smell. In Thailand, the heading type is exported as pickled vegetable in cans. Sarawak imports a substantial amount of salted mustard from Thailand and China in plastic containers as well as in earthen jars.

Leaf mustard is an erect, unbranched, annual herb with variable leaf shapes and sizes, either heading or non-heading and with terminal raceme inflorescence. It grows best in fertile well-drained loamy soils.

General Cultivation

Leaf mustard is propagated from seeds purchased from commercial seed suppliers or from own selection. The seeds can be direct seeded or transplanted to open fields or in nethouses. For direct seeding, thinning of plants has to be carried out at 2–3 weeks after sowing or when the plants have 3–4 true leaves. For transplanting, seeds may be nursed in well prepared nursery beds or seeding trays filled with peat gro or enriched nursery soil. Watering is necessary for vigorous seedling growth. The healthy seedlings are transplanted to the field when they are 2–3 weeks old.

The seedlings are spaced at 20–25 cm apart. Basal dressing of 1–2 kg/m² well composted chicken dung, 100–200 g/m² dolomite and 30 g/m² compound NPK fertilizer are applied to the prepared beds 1–2 weeks prior to transplanting or seeding. Side dressings of 30–40 g/m² of the same fertilizer are given at weekly intervals until harvest.

Recommended Variety

ARC Semongok has been screening leaf mustard varieties from local and imported sources. The department now recommends 'ARC-MD101' (318 Choi Hing Lee Special) for home garden as well as for commercial production.

This variety is a head forming leaf mustard. It adapts well to our local conditions, is a consistently high yielder, has attractive green colour, appealing appearance and good eating quality. It grows well in the nethouses and open fields.

Crop Management

Except for occasional attack by armyworm, diamond-back moth, flea beetle and snails, there is no serious pests problem. These pests should be controlled early by using only registered pesticides. Integrated pest management and good agricultural practices should also be practised by the farmers.

Important disease such as soft rot may occur during the hot and wet season. There is no effective chemical control for this disease. However, this can be overcome by planting resistant and early maturing varieties, and crop rotation practice.

Weeds have to be controlled early. One to two rounds of handweeding is necessary in the early stages of crop growth to reduce weed competitions and to offer optimum growing conditions for the plant.

Harvesting and Post Harvest Handling

Harvesting during the hottest part of the day should be avoided because the harvested plants lose water and wilt very quickly. The entire plant (about 20–30 cm tall with 6–8 fully expanded leaves) are cut at ground level with a sharp knife. Harvested plants should be put in shade quickly to minimize water loss. The plants are then washed, cleaned and packed in baskets with good ventilation for transporting to the markets.

Financial Returns

The average yield of leaf mustard is 25–35 mt/ha. The estimated production cost inclusive of wages per season is RM4,000/ha. For a yield of 25 mt/ha and a farm gate price of RM0.90/kg, the estimated net returns per season is RM16,000/ha.



Growing mustard in the nethouse



Recommended mustard variety 'MD101'

