BLACK PEPPER

Black Pepper - (*Piper Nigrum Linn)* is a viny perrenial plant producing berry-like and aromatic pungent fruits. It is locally known as "pamienta" or "paminta" which belongs to Family Piperaceae. Leaves are thick, green with ovate shape. Flowers are white and minute which produce fruits borne on short, hanging spikes 4 t0 12 cm. long. Berry-like fruits are green when unripe and become red at maturity.

Dried ripe berries become black and wrinkled constituting black pepper. Black pepper yield both black and white pepper. Black pepper is made by drying ripe or unripe fruits under the sun; white pepper by soaking, treating and removing outer skin of berry before drying.

Peppercorn is marketed whole or ground. Black pepper is used as a seasoning in food preparation to enhance food acceptability. Essential oils cleoresions extracted from black pepper are used in the preparation of piperazine elixir, a drug formulation for removal of round-worms in intestinal tract of human beings.

Varieties of black pepper are classified according to their respective source of origin, most common are Batangas, Laguna, Quezon, Davao, Zamboanga or Basilan black pepper.

SOIL AND CLIMATE

Black pepper grows in almost all types of soil. However, it thrives well in loose, well-drained soil. It is best suited under humid climate with rainfall of 100 to 250 cm and in an elevation of 350 meters above sea level.

CULTURE

Seedbedding

Propagation of black pepper cuttings is prepared in seedbeds like vegetable crops. Till soil with garden hoe and reduce soil to very fine tilt. As soil is pulverized, add fine river sand to make bed more porous. Incorporate compost to make it more fertile. Drench seedbed with Captan spray solution at a concentration of 5 level tablespoonfuls Captan per gallon of water. Apply solution at the rate of one petroleum canful per 5 square meters of bed.

Propagation

Black pepper is propagated by sowing seed, marcotting and by stem cutting. Of the three methods, stem cutting is generally employed using both terminal stem and lateral branches. Select planting materials from high yielding hermaphrodite mother plant. Divide stem into cuttings each with 3-5 internodes and cuttings are rooted in sandy seedbed under shade. Insert cutting at 45degree angle 15 centimeters apart each way. When cutting has developed 4-7 new leaves, then it is ready for transplanting in the field.

In marcotting method, secure black pepper branches on 1/2 inch wide bamboo pegs and cut each of them at fourth node from top of cacao or mabolo leaf filled with clean garden soil or moist sphagnum moss. If plastic sheet is available, cut into, convenient pieces and use for enclosing soil or moss and tie both ends with string or vegetable tying material. In 3-4 weeks, each marcot can be separated from mother plant and set in the field.

Land Preparation

For backyard planting select well-drained area and divide into equal areas of 2 x 2 square meter lots. To each corner of these lots, dig holes 60 cm sq about 40 cm deep, separate topsoil from subsoil. At center of hole, plant "kakawate" post 4 cm in diameter and 2 meters long for pepper vines to climb on as they grow. Fill up holes with 50-50 mixture of compost and topsoil. For large scale planting whether in cultivated or newly opened land, choose rolling area to have good drainage For newly opened area, other crops may be planted first for at least 3 years to free it from decaying tree stumps which may be sources of diseases. After 3 years, prepare land as backyard planting.

TRANSPLANTING

Transplant black pepper at the start of rainy season, 800 cm apart from the post with seedlings opposite each other. Around 3,200 seedlings are needed per hectare. It starts to bear fruits three years after planting. Open space can be utilized for planting short-lived catch crops such as snapbeans, ginger, hot and sweet pepper at a distance of one meter away from black pepper rows.>

MANAGEMENT

Black pepper needs weeding, mulching and pruning. When seedling reaches one or two feet high, nip off the top growing vine to induce more branching. Prune old and unproductive branches and crowding laterals.

Farmers engaged in black pepper farming do not usually use extensive commercial fertilizers, but to ensure abundant harvest, apply the following rates:

Plant Age	Rate
6 months old	100 grams of 14-14-14
1 year	220 grams of 14-14-14
2 years	500-700 grams of 14-14-14

*****Add compost to each hill every 2 to 3 months.

CONTROL OF PESTS AND DISEASES

Common pests are leafhoppers, root grubs, and African snails. Control leafhoppers by spraying with either Sevin or Malathion at the rate of one level tablespoonful per gallon of water.

Drench hill with Aldrin spray at a concentration of on tablespoonful per gallon of water to control grubs. Collect snails and use them as fertilizer or poison with baits obtained at BPI.

Black pepper, when properly planted, is not prone to any seriouse diseases outbreak.

HARVESTING

Peppercorn (berry-like fruit) matures in 5 to 6 months. The whole spike is ready for picking when:

- peppercorn in a spike turns cherry-red

- peppercorn turns from dark green to shiny yellowish green

- peppercorn has brownish cotyledon when pinched.

Harvest during sunny days. Open basket or sack used as container is tied to the waist of harvester. He twirls the spike with one hand while he holds the peduncle with the other hand.

DRYING

There are two ways of drying black pepper to yield two types of black pepper: the black peppercorn and the white pepper. Black peppercorn is black pepper dried under the sun or solar radiation to 12 % moisture content. Spread peppercorn on mat and remove spike, then peppercorn is winnowed, cleaned and stored in sacks. To produce white pepper, remove ripe berries from spikes, place in bags and soak in running water 1 to 2 weeks to soften skin. Remove skin by hands or by treading on berries with the feet. Wash and dry immediately smooth, white kernels.