

Buckwheat (*Dhemchi*)
(*Fagopyrum esculentum* L. syn. *Polygonum fagopyrum*)

Variety: Local

Duration: 90-110 days

Soil type: Sandy loam

Land preparation:

The land should be ploughed thoroughly and leveled properly. Four to five ploughings followed by laddering are sufficient to obtain a good tilth. The first ploughing should be done preferably about one month ahead of sowing.

Time of sowing:

Sept-Oct for Upper Brahmaputra Valley Zone and Oct-Mid Nov. for Lower Brahmaputra Valley Zone

Seed rate: 20 kg/ha (2.7 kg/bigha)

Spacing: 30 cm between rows

Method of sowing:

Furrows of about 5 cm depth are to be prepared at a distance of 30 cm. Seeds are to be sown in the furrows preferably at 3-5 cm depth but not deeper than 5 cm. Then laddering is to be done along the furrows which will cover the seeds with soil and ensure soil compaction resulting in uniform and quick germination.

Fertilizer management:

Nutrient	Requirement (kg/ha)	Form	Fertilizer requirement	
			kg/ha	kg/bigha
N	20	Urea	44	6
P ₂ O ₅	10	SSP	63	9
K ₂ O	10	MOP	15	2

All the fertilizers are to be applied by thoroughly mixed with soil, preferably one day before sowing.

Weed control:

Weeding should be done before the weed plants attain 4-5 leaf stage. Dryland weeder may effectively be used.

Plant protraction:

A). Insect pests:

- i). **Aphid:** When the aphid attack is heavy, imidacloprid 17.8SL @ 20.0 g a.i./ha or 1 0.3 ml / lit. may be applied.

Spray solution requirement for hand sprayer and power sprayer are 500-700 lit/ ha (65-90 lit/bigha) and 200-250 lit/ha (25-30 lit/bigha) respectively.

Bee pollination:

For enhancing yield through increased pollination, 5-6 numbers of honeybee colonies/ ha should be installed.

Harvesting:

Harvesting should be done when the grains turn blackish and ears are dry. After harvesting, the plants are to be kept in the field for 2-3 days for sun drying. Threshing is done by treading with bullocks or beating the plants with sticks.

Average yield: 12-15 q/ha

Uses:

After threshing, the grains are to be dehusked in *dhenki*, a locally used dehusking device. The dehusked grains are pure white and flour is made out of the grains. The flour is used to make *chapattis*. Sometimes it is mixed with wheat and barley flour. The tender green plants are used as green vegetables and the straw of plants are used for cattle feed. The dried plants can be used as firewood.