SPINE GOURD
(Momordica dioica)

Spine gourd is a perennial climber with tuberous root, almost 4 m long vine bearing simple tendrils and distinctly dioecious species of family cucurbitaceae grown widely in different parts of Meghalaya. Immature tender green fruits are cooked as vegetables. Young leaves, flower and tuberous roots are also eaten. It contains high amount of carotene and protein.

Climate and Soil
Spine gourd thrives well under warm humid climate. This can be grown successfully in areas where temperature ranges 25-40°C with annual rainfall of IS0-200 cm. It grows well under sandy loam soils, rich in organic matter. Optimum soil pH for the crop ranges from 6.0-7.0.

Field Preparation
The field is prepared by digging pit. The pit is filled with 5kg FYM, 150g SSP and 50g MOP and 3g Furadon to prevent termites. Two time topdressing of Urea @ 80g near the root zone promote plant growth and development

Seed Rate
3000-5000 tubers/ha.

Time of Sowing
The best time of planting tubers is February- March.

Spacing
2mX 1 m.

Manure and Fertilizer
The dose of fertilizer depends upon soil, climate and system of cultivation. Well rotten FYM @15-20 t/ha is applied at the time of land preparation. NPK @ 120:80:80 kg/ha is added with full dose of P and K before sowing and half dose of N at the time of vining and remaining half dose of N before flowering.

Irrigation
Just after sowing of seed or placement of cuttings irrigation is essential and it should continue for 4-5 days.
**Training**

As the crop is climbing in nature, provision of supporting structure encourage proper vegetative growth and thereby contribute to good yield of quality fruits. Different system of training viz. single stake system, bower and kniffin system are followed as per availability of training materials.

**Plant protection**

Same as in Cucumber

**Harvesting and Yield**

Fruits are ready for harvest within 75-80 days in first year and 35-40 days from second year. Fruits should be harvested at mature green stage.

Under optimum crop management condition fruit yield is 75-100 q/ha.