



SHIV GANGA HYBRID SEEDS PVT. LTD.

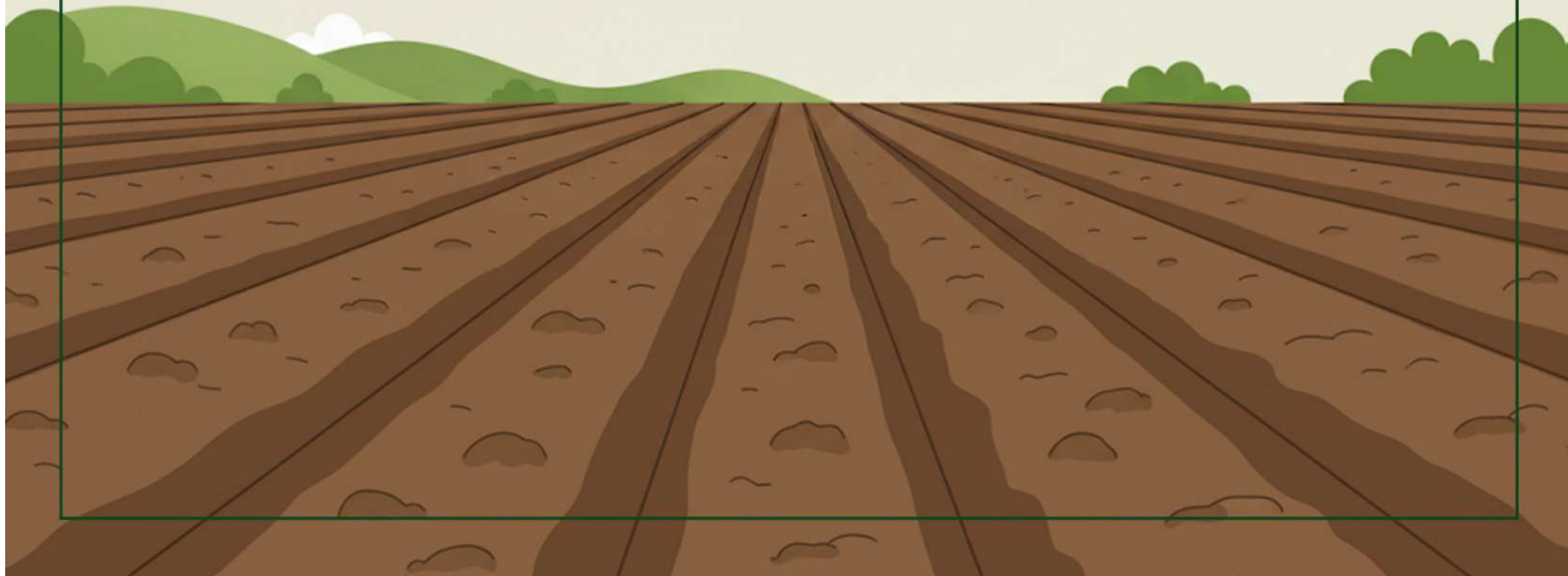
**RAM BHAWAN, IN FRONT OF SUSHILA BHAWAN, BALSAMAND ROAD, HISAR-125001
(HARYANA) / PHONE NO. 70159-27772**

**COMPREHENSIVE RECOMMENDATIONS FOR BERSEEM
(TRIFOLIUM ALEXANDRINUM) CROP PRODUCTION**



SOIL :-

For berseem production, loam, sandy loam, and black soil with proper drainage are suitable.



FIELD PREPARATION :-

The first ploughing should be done with a soil-turning plough, followed by 2–3 ploughings with a normal plough, and then level the field.





HARI-HAR
SEEDS

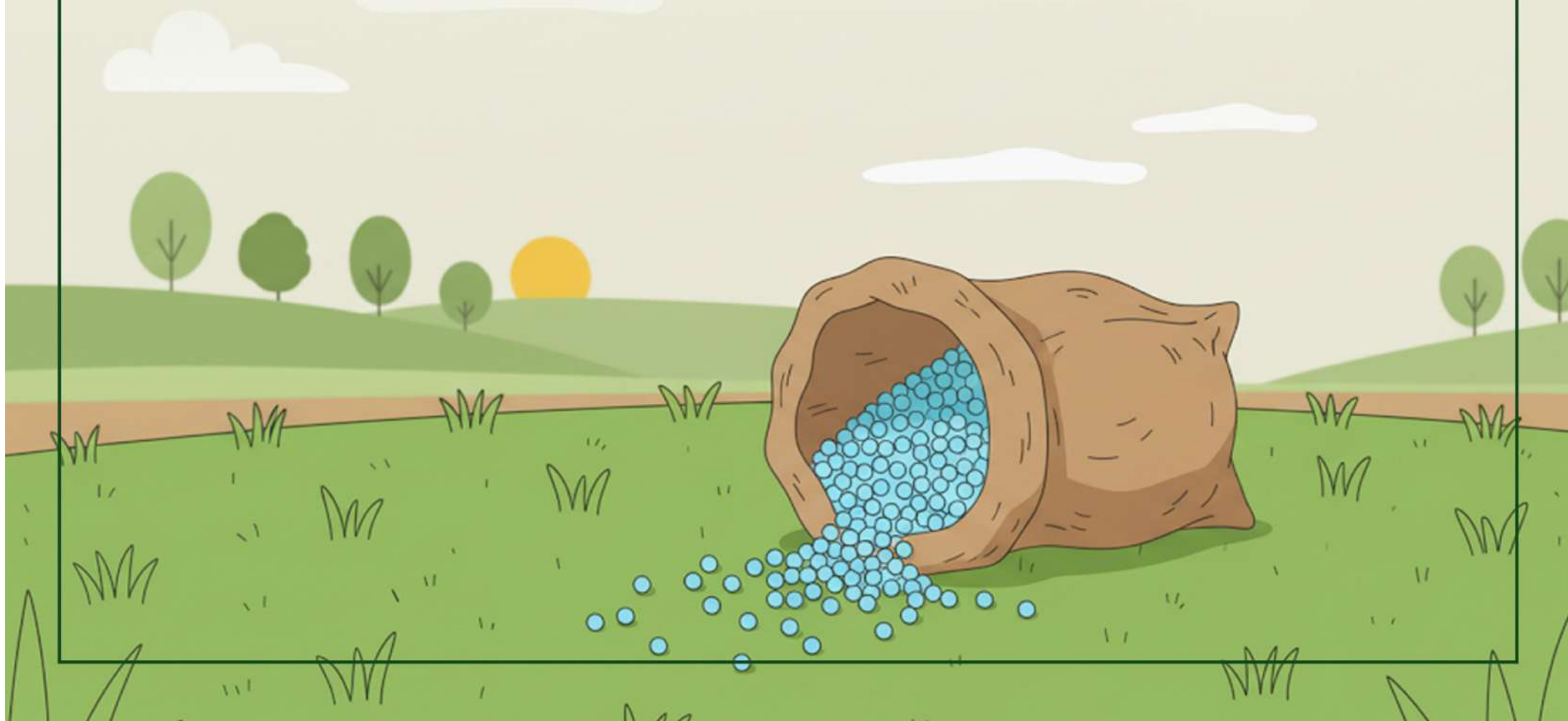
TIME OF SOWING :-

The best time for sowing berseem is from the last week of September to the last week of October. However, sowing can be done up to the last week of October.



SEED QUANTITY :-

8–10 kg processed and tested chicory- and saftal-free seed per acre is sufficient.





VARIETIES :-

Maskawi, BL-10 (Hadu), BL-42, BL-1, HB-1, HB-2, Multicut Berseem, Long Duration.

SEED INOCULATION :-

Berseem seeds should be inoculated with *Rhizobium trifolii* culture as this bacteria fixes Nitrogen. This culture will be available from Haryana Agricultural Universities. Prepare a 10% jaggery solution using half a kilo of jaggery, mix one packet of *Rhizobium* culture into 8–10 kg seed, coat the seed on a cemented floor in shade, dry it, and sow in the evening. (Because bacteria can be affected by daytime heat.)



SOWING METHOD :-

Scatter the seed in still standing water in the field. If it is windy, broadcast the seed in the field, mix it with soil, and then irrigate. Berseem seeds should not contain chicory (Chicory), saffat Persian clover (*T. resipunatum*), senji (Indian Clover – *Melilotus indica*), and other weeds. Therefore, before inoculation, dip the seed in 2% salt solution, remove chicory and other weed seeds that float, and then inoculate. For better yield, sow berseem (8 kg) mixed with 750 grams mustard/rapeseed, or 15 kg oats. Mixing 2–3 kg ryegrass with berseem also gives high-quality and nutritious fodder.



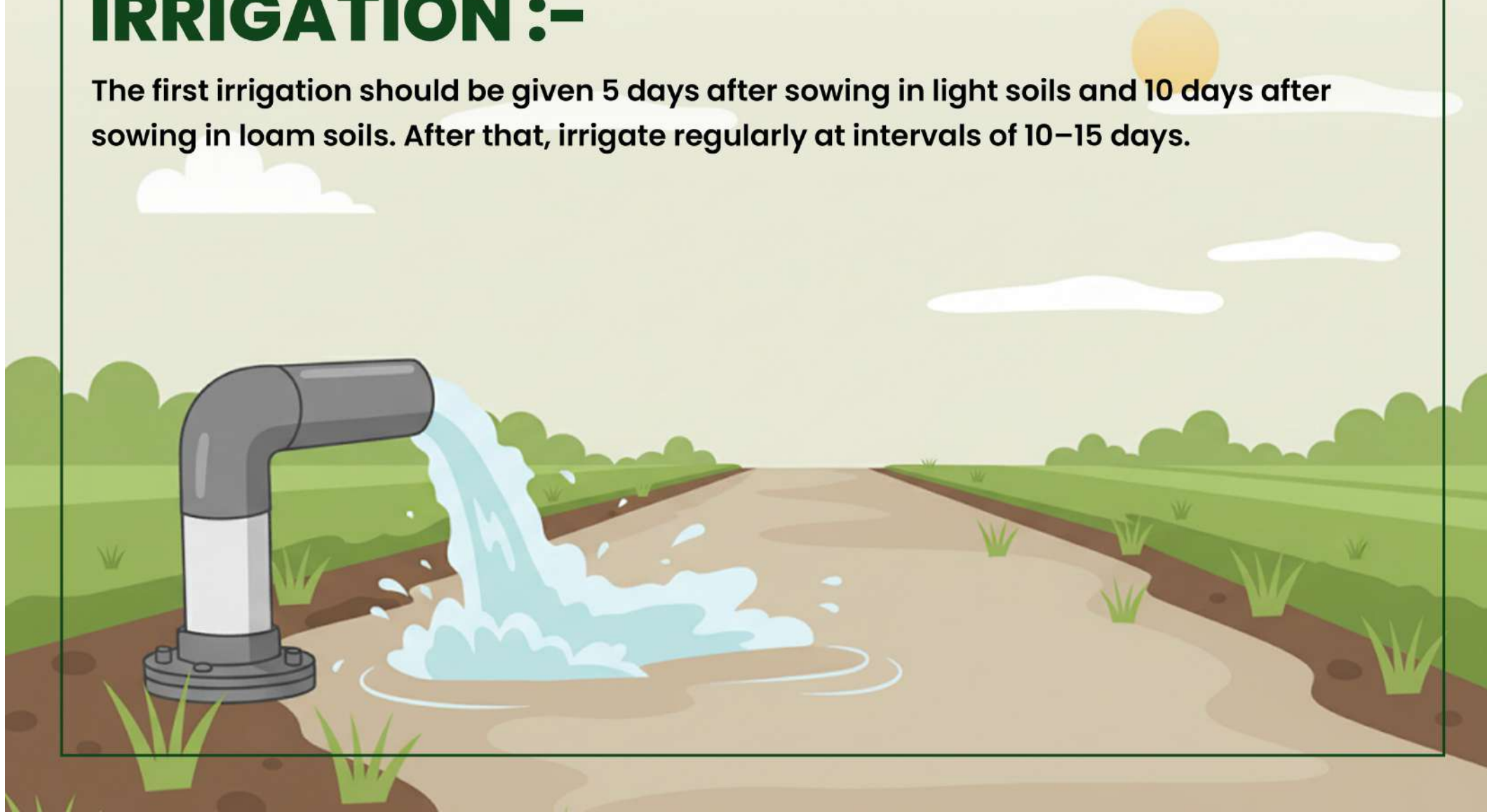
FERTILIZERS AND MANURES :-

Apply 10 kg nitrogen (22 kg urea) and 30 kg phosphorus (175 kg single superphosphate per acre) along with 6 tons of well-decomposed farmyard manure at sowing. Afterwards, apply 10 kg nitrogen (22 kg urea) after each cut.



IRRIGATION:-

The first irrigation should be given 5 days after sowing in light soils and 10 days after sowing in loam soils. After that, irrigate regularly at intervals of 10–15 days.



PLANT PROTECTION :-

(A) Diseases: (i) In areas where berseem is taken after paddy, due to manganese deficiency, the middle leaves of berseem appear brown or yellow. Therefore, spray 0.5% manganese sulphate (1 kg manganese in 200 liters of water) twice.

(ii) Stem Rot (*Sclerotinia-Sclerotiorum*): Cotton-like growth appears on the stem near roots. Spray Bavistin 400 grams in 200 liters of water.

(B) Insect Control: To protect the crop from green caterpillar (*Heliothis armigera*), grasshopper, etc., spray 60 ml Tracer (48% Spinosad) mixed in 100 liters of water per acre.



WEED CONTROL:-

To control dodder (*Cuscuta reflexa*) in berseem, spray Emazethapyr or remove manually by hand-pulling.



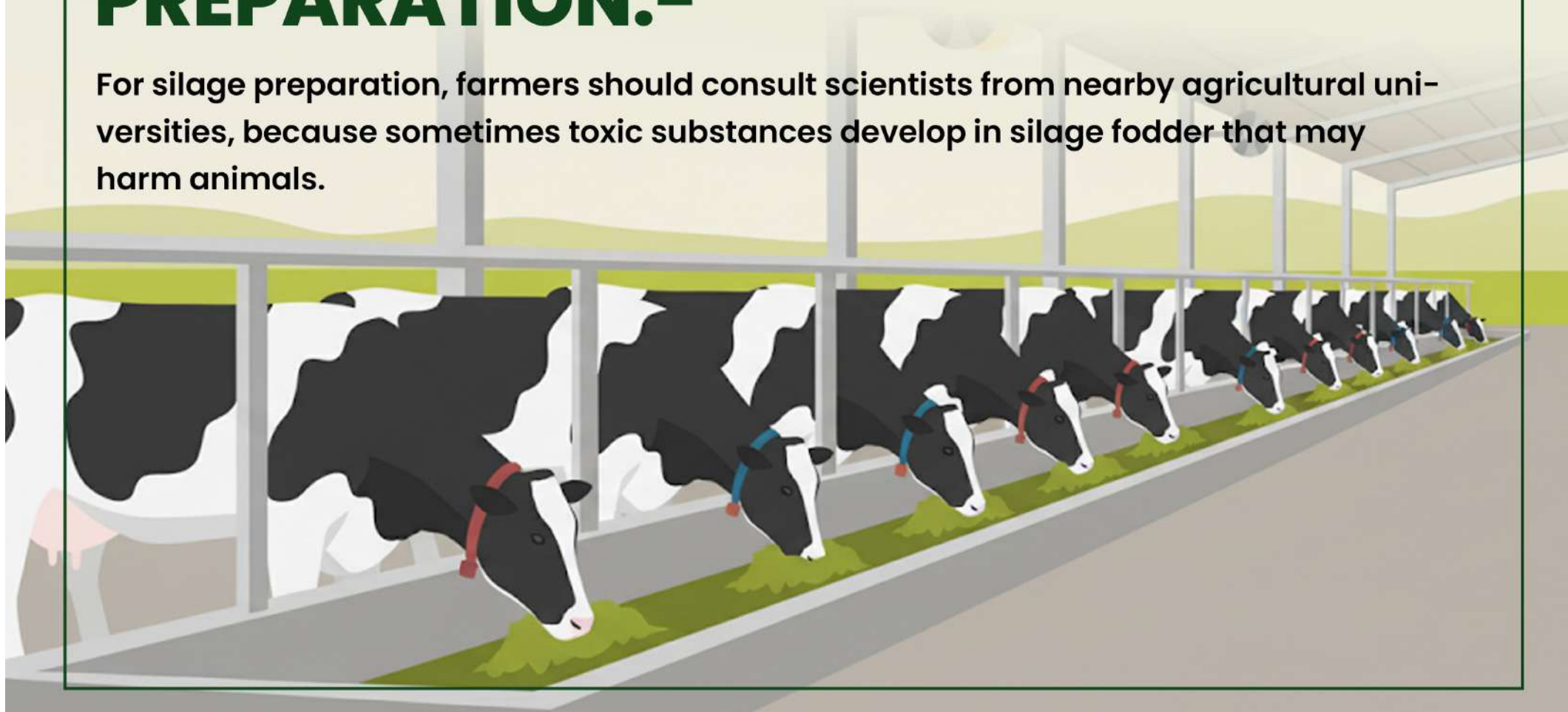
HARVESTING :-

The first cut should be taken 50 days after sowing, and subsequent cuts at intervals of 40 days.



SILAGE (PICKLED FODDER) PREPARATION:-

For silage preparation, farmers should consult scientists from nearby agricultural universities, because sometimes toxic substances develop in silage fodder that may harm animals.



NOTE :-

The comprehensive crop production recommendations in this leaflet are based on the research and experiences of agricultural universities, Krishi Gyan Kendra, Krishi Vigyan Kendra, agricultural scientists, progressive farmers, and government agricultural experts. The crop/variety yield does not depend solely on seed but also on soil, fertilizers, manures, other factors, and environment. Farmers from different regions should use the advice of local agricultural scientists, experts, and their own experience according to local conditions to achieve not just good but the best production.

