



SHIV GANGA HYBRID SEEDS PVT. LTD.

RAM BHAVAN, OPPOSITE SUSHILA BHAVAN, BALSAMAND ROAD, HISAR-125001 (HARYANA)

PHONE NO. 70159-27772.

COMPREHENSIVE RECOMMENDATIONS FOR BAJRA CROP PRODUCTION (Pennisetum americanum)

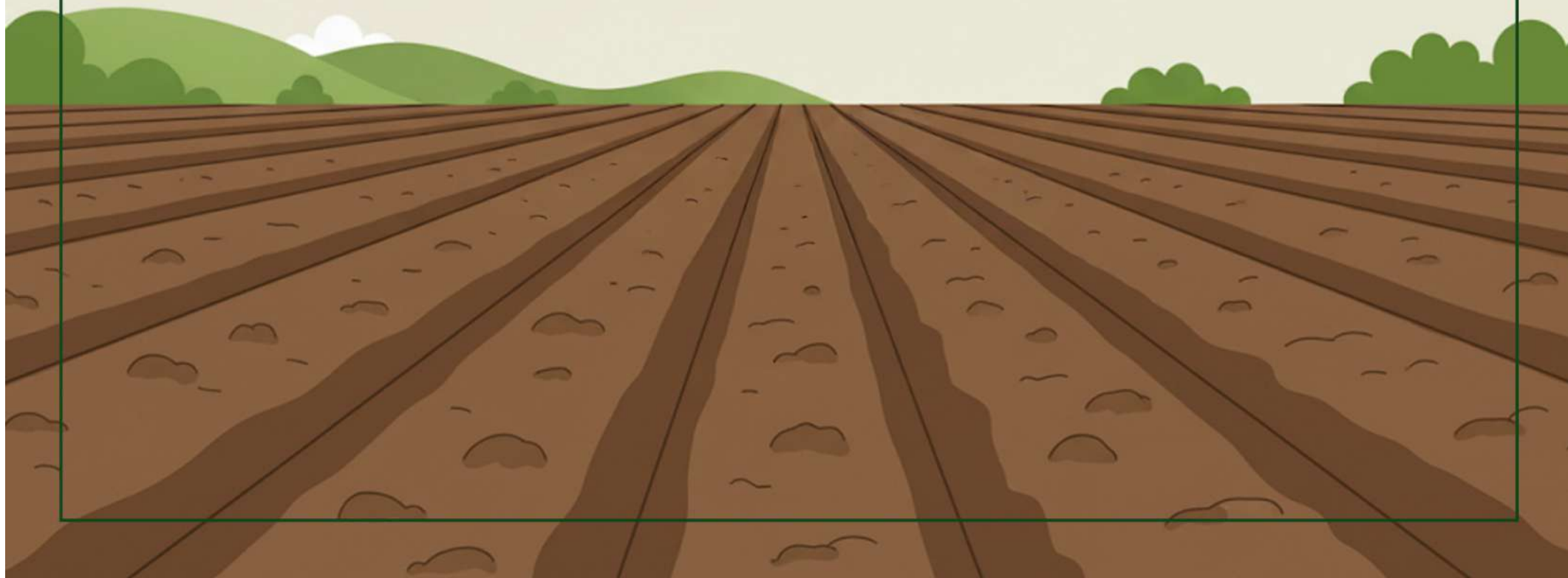
BAJRA IS CONSIDERED THE FOOD OF THE POOR. IT COMES UNDER COARSE GRAINS. IT HAS A HIGHER NUTRITIONAL VALUE THAN SORGHUM. HOWEVER, THE QUANTITY OF NUTRIENTS AND ENERGY IN THE DIET, I.E., FEEDING VALUE, IS LOWER.





LAND SELECTION :-

BAJRA CAN BE GROWN IN ALL TYPES OF SOILS, BUT IT IS NOT GROWN IN WATERLOGGED SOILS. THEREFORE, WATER DRAINAGE IS NECESSARY. IT CAN BE SUCCESSFULLY GROWN IN SANDY LOAM, BLACK SOIL, AND ALLUVIAL LAND.





HARI-HAR
SEEDS

LAND PREPARATION :-

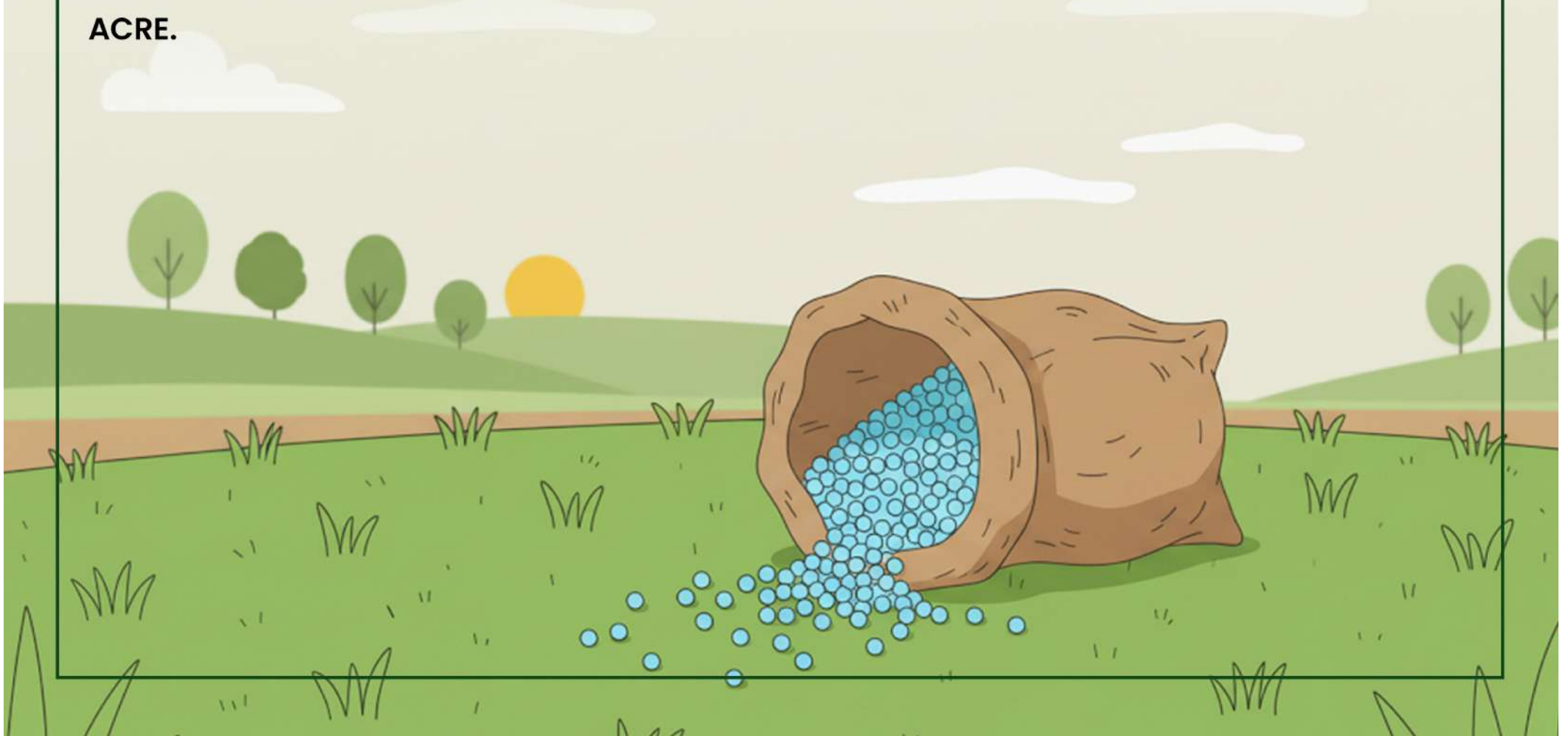
WHILE PREPARING THE FIELD FOR BAJRA PRODUCTION, DO ONE PLOWING 15 CM DEEP WITH A SOIL-TURNING PLOW. AFTER THIS, DO 2 TILLINGS WITH A COUNTRY PLOW, DISC HARROW, OR TILLER AND APPLY A PLANK (PATELA).





SEED QUANTITY :-

USE 1000 GRAMS TO 1500 GRAMS OF CERTIFIED OR CLEAN T.L. HYBRID BAJRA SEED PER ACRE.



SEED TREATMENT :-

BEFORE SOWING THE SEEDS, TREAT THEM WITH 2 GRAMS OF CARBENDAZIM PER KG, AND AFTER THAT, TREAT 2 KG OF SEEDS WITH 40 GRAMS OF AZOTOBACTER (AZOTIKA 54). BY INDEPENDENTLY ESTABLISHING NITROGEN IN THE SOIL, AZOTOBACTER CREATES THE POSSIBILITY OF AN ABUNDANT CROP.





SOWING METHOD :-

DO NOT SOW BAJRA BY BROADCASTING. THE EFFECTIVE NUMBER OF PLANTS IN A BAJRA CROP SHOULD BE 80,000 PER ACRE, WHICH IS 20 PER SQUARE METER. THEREFORE, A DISTANCE OF 45 CM BETWEEN LINES AND 10 CM BETWEEN PLANTS SHOULD BE MAINTAINED. THE SEED SHOULD BE PLACED AT A DEPTH OF 2.5 CM. SOWING SHOULD BE DONE USING PORA, KERA, OR A SEED DRILL.





VARIETIES :-

HC-1, HC-10, SAFAL-65, HH-4665, HH-21, HHB-223, HHB-197, HHB-299, HHB-67,
HHB-67 IMPROVED.





SOWING TIME :-

BAJRA IS A SUMMER CROP AND SOWING IN JUNE-JULY IS BEST.





MANURE AND FERTILIZERS:-

BEFORE DETERMINING THE QUANTITY OF MANURE AND FERTILIZER, ONE SHOULD CHECK THE SOIL HEALTH CARD. IF A SOIL HEALTH CARD HAS NOT BEEN MADE, 100-150 QUINTALS OF COW DUNG MANURE OR GREEN MANURE SHOULD BE USED DURING FIELD PREPARATION. IN ADDITION, TO GET A BUMPER YIELD FOR HYBRID BAJRA IN IRRIGATED AREAS, USE 50 KG N (I.E., 110 KG UREA), 20 KG P_2O_5 (I.E., 150 KG SINGLE SUPER PHOSPHATE), 12 KG POTASH (I.E., 20 KG MOP), AND 10 KG ZINC. IN UNIRRIGATED AREAS, USE 20 KG N (45 KG UREA) AND 10 KG P_2O_5 (65 KG SINGLE SUPER PHOSPHATE). TIMING: APPLY 1/3 QUANTITY OF NITROGEN, AND THE FULL QUANTITY OF SINGLE SUPER PHOSPHATE, MURIATE OF POTASH, AND ZINC AT THE TIME OF SOWING. APPLY ONE INSTALLMENT OF UREA AT THE TIME OF THINNING (I.E., 3-4 WEEKS AFTER SOWING) AND THE SECOND INSTALLMENT AT THE TIME OF EARHEAD/PANICLE FORMATION.





WEED CONTROL :-

HOEING SHOULD BE DONE 5 WEEKS AFTER SOWING. DEEP HOEING SHOULD BE AVOIDED.

CHEMICAL: FOR CHEMICAL CONTROL, TO DESTROY WEEDS LIKE ITCIT, CHUPPATI, ETC., IMMEDIATELY AFTER SOWING BAJRA BUT BEFORE EMERGENCE, IT IS BEST TO SPRAY 400 GRAMS OF ATRAZINE 50% W.P. IN 250 LITERS OF WATER.



IRRIGATION :-

BAJRA IS A RAINY SEASON CROP, HENCE WATER SHOULD BE GIVEN ACCORDING TO THE CONDITIONS. IF IT IS NOT RAINING, 2 IRRIGATIONS ARE SUFFICIENT. NOTE THAT CROP PRODUCTION WILL NOT MEET EXPECTATIONS WITH SALINE WATER. KEEP IN MIND THAT WATER SHOULD NOT ACCUMULATE, AND EXCESS WATER MUST BE DRAINED.





PEST CONTROL :-

(I) HAIRY BLACK CATERPILLAR:- SPRAY 250 ML MONOCROTOPHOS OR 250 ML DICHLORVOS (NUVAN) IN 250 LITERS OF WATER.

(II) WHITE GRUB:- SPRAY 250 ML MONOCROTOPHOS IN 250 LITERS OF WATER.



DISEASES :-

(I) GRAIN SMUT (KAJIYARI) – THIS DISEASE SPREADS BY THE FUNGUS TOLYPOSPORIUM PENICILLARIAE; NOT THE WHOLE EARHEAD, BUT SOME GRAINS ARE AFFECTED. THEY START APPEARING DISTINCT FROM THE GREEN GRAINS IN THE EARHEAD. THIS IS THE OUTER MEMBRANE OF THE GRAIN, AND AS SOON AS IT BURSTS, BLACK POWDER IS VISIBLE. BEFORE SOWING, 2.5 GRAMS OF AGROSAN (PMA) PER KG OF SEED OR 3 GRAMS OF THIRAM PER KG OF SEED SHOULD BE TREATED AND SOWN. PLUCK THE AFFECTED EARHEADS AND BURY THEM IN THE SOIL.



DISEASES :-

(II) DOWNY MILDEW / GREEN EAR DISEASE – THIS DISEASE IS SPREAD BY THE FUNGUS SCLEROSPORA GRAMINICOLA. THE EFFECT OF THIS DISEASE FIRST APPEARS ON THE LEAVES; THE LEAVES BECOME YELLOW OR WHITE AND DOWNY. A STREAK FORMS FROM THE EDGE OF THE LEAF TO THE BASE, THE PLANT REMAINS SMALL, GROWTH STOPS, AND THE LEAF TURNS YELLOW. THIS STAGE IS CALLED DOWNY MILDEW, BUT IF THE DISEASE IS NOT CONTROLLED, THE WHOLE OR PART OF IT TURNS INTO A GREEN EARHEAD, WHICH DIRECTLY AFFECTS THE PRODUCTION. AS SOON AS SYMPTOMS INITIALLY APPEAR ON THE CROP, SPRAY 2% DITHANE Z-78 ON A 2 TO 3-WEEK-OLD CROP UP TO THE BOOT STAGE.



DISEASES :-

(III) ERGOT – THIS DISEASE IS CAUSED BY THE FUNGUS CLAVICEPS FUSIFORMIS. IN THIS, SOME GRAINS (KERNELS) ARE AFFECTED. AT THE TIME OF FLOWERING, A PINK STICKY SUBSTANCE EMERGES FROM THE GRAINS AND STARTS FALLING ON THE GROUND. THIS IS A POISONOUS SUBSTANCE, AND EATING THESE GRAINS CAN CAUSE LOSS OF HUMAN AND ANIMAL LIFE. AS SOON AS SYMPTOMS OF THE DISEASE ARE SEEN, SPRAY 500 ML OF CUMAN L 27% (ZIRAM) IN 100 LITERS OF WATER ON THE CROP. THE AFFECTED EARHEADS SHOULD BE BURNED OR BURIED.





NOTE :-

THE RECOMMENDATIONS FOR GETTING EXCELLENT BAJRA PRODUCTION ARE BASED ON THE EXPERIENCES OF THE COMPANY'S OWN RESEARCH FARM, AGRICULTURAL UNIVERSITIES, AND PROGRESSIVE FARMERS. DIFFERENT FACTORS AFFECT THE YIELD IN DIFFERENT CLIMATIC ZONES, THEREFORE, IF FARMERS ARE NOT SATISFIED WITH THESE RECOMMENDATIONS, THEY CAN ADOPT AGRONOMIC PRACTICES FROM OTHER SOURCES. FOR DIFFERENT GEOGRAPHICAL AREAS, ADOPT A PACKAGE OF PRACTICES BY CONSULTING LOCAL AGRONOMISTS, EXPERTS, AGRICULTURAL UNIVERSITIES, AND KRISHI VIGYAN KENDRAS.

