

Chickpea -- State wise technologies

Andhra Pradesh

Varieties	JG-11, JAKI 9218, MNK-1, NBeG 3
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : 2 nd fortnight of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding, if required
Irrigation	One irrigation at pod initiation stage / Sprinkler irrigation
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, Spray of 2% urea at flowering stage (70 DAS) and 10 days thereafter
Plant Protection	<p>Pest monitoring :</p> <ul style="list-style-type: none"> • Installation of Pheromone traps 5-6 traps/ha (6 male moth catches/night). • Trap crop of marigold • Installation of bird perches – 30 – 40/ha (Remove bird perches at the time of maturity) • Spray of NSKE 5%/NPV 250 LE, Indoxocarb 500 ml/ha <p><i>Helicoverpa armigera</i> (Pod borer) Adopt IPM practices against <i>Helicoverpa</i> in bengalgram</p> <ul style="list-style-type: none"> • Follow strip cropping of bengalgram with coriander (8:2 or 16:4) • Sow 4 rows of sorghum all round the plot • Transplant 50-100 marigold seedlings all round the plot • Monitoring with pheromone traps @ 10/ha to target the pest at right stages. • Use bird perches (50/ha) • Use neem formulations for insect repelling (NSKE 5%) soon after the pest occurrence. • Use biocides like <i>Bt</i> @ 1 kg/ha and NPV @ 500 LE/ha twice at an interval of 7-10 days in the evening hours. • If necessary spray chlorpyrifos @ 2.5 ml/l or quinalphos @ 2 ml/l or acephate @ 1.0 g/l. In severe case, spray spinosad @ 0.35 ml/l or Rynaxypyr @ 0.2 ml/l or Indoxacarb @ 1 ml/l. <p><i>Spodoptera exigua</i></p> <ul style="list-style-type: none"> • The incidence of <i>S. exigua</i> generally appears at early vegetative stage i.e., up to 20-30 days after sowing. Larvae damage the lower leaves by scraping. In severe case, foliage will drop down. <p>Spray either Neem oil 5 ml/lit or monocrotophos @ 1.6 ml/l or acephate @ 1.0 g/l or quinalphos @ 2.0 ml/l or thiodicarb @ 1 g/l.</p>

Gujarat

Varieties	Gujarat Gram-1, GG-2, GJG 3, Raj Vijay Gram 202, Raj Vijay Gram 203, JG-16, KAK 2 (K)
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavex (Carboxin)(1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, 25 kg ZnSO ₄ /ha, Spray of 2% urea at flowering stage (70 DAS) and 10 days thereafter
Plant Protection	Pest monitoring : <ul style="list-style-type: none"> • Installation of Pheromone traps 5-6 traps/ha (6 male moth catches/night). • Trap crop of marigold • Installation of bird perches – 30 – 40/ha (Remove bird perches at the time of maturity) • Spray of NSKE 5%/NPV 250 LE, chlorantraniliprole 20 SC 0.003% (1.5 ml/ 10 liter water; 15 g a.i./ha) or emamectin benzoate 5 SG 0.001% (2 g/ 10 liter water; 5 g a.i./ha) or profenophos 50 EC 0.1% (20 ml/ 10 liter water 500 g a.i./ha).

Karnataka

Varieties	JG-11, MNK-1, Phule G 0517, GBM 2
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : 2 nd fortnight of Oct.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding if required
Irrigation	One irrigation at pod initiation stage / Sprinkler irrigation
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, Spray of 2% urea at flowering stage (70 DAS) and 10 days thereafter
Plant Protection	Pest monitoring : <ul style="list-style-type: none"> • Installation of Pheromone traps 5-6 traps/ha (6 male moth catches/night). • Trap crop of marigold • Installation of bird perches – 30 – 40/ha (Remove bird perches at the time of maturity) • Spray of NSKE 5%/NPV 250 LE, Indoxocarb 500 ml/ha
	Pod Borer, <i>Helicoverpa</i> eggs or larvae when noticed more than one per 10 plants or per metre (ETL) row use any of the following insecticides :
	Ovicide : Profenophos 50EC at 3ml per litre (1.5L/ha) / Methomyl 40SP 0.6g/L (300g per ha)
	Bio product : <i>Ha</i> NPV 250LE per ha
	Botanicals : Chilli (0.2%)+Garlic (0.2%) (1.0kg each of Chilli and garlic per ha)
	Larvicides : Rynaxypyr 20 SC 0.02ml/l (100ml/ha) / Fluebendiamide 480 SC 0.10ml/l (40ml/ha) / Emamectin benzoate 05SG 0.2g/l (100g per ha) / Spinosad 45SC 0.1ml/L (50ml per ha) / Indoxacarb 14.5SC 0.3ml/L (150ml per ha)/ Methyl Parathion 50EC 1.0ml/L (500ml/ha) /Quinalphos 25EC 2.0ml/L (1000ml per ha) /Acephate 75SP 1g/L (500g per ha)

Madhya Pradesh

Varieties	JG 16, JG 130, JG 322, JGK-1 (K), JAKI 9218, PKV-4 (K), JG 14, Raj Vijay Gram 202, Raj Vijay Gram 203, Raj Vijay Kabuli 101, Raj Vijay Gram 201, Phule G 0517
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm line spacing
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin)(1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed • Seed treatment with Ammonium Molybdate @ 1g/kg of seed in the areas of chickpea-soyabean cropping system
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, 25 kg/ha ZnSO ₄ , Spray of 2% urea at flowering stage (70 DAS) and 10 days thereafter
Plant Protection	<p>Pest monitoring :</p> <ul style="list-style-type: none"> • Periodic monitoring of the crop especially at the reproductive phase of the crop is essential. • Deep summer ploughing once in 3 years should be done to eliminate quiescent pupae. • Install pheromone traps at a distance of 50m; 1.5m above the ground @ 12 traps/ha for monitoring. • At flowering stage of the crop, install bird perches @ 50/ha and remove the perches at grain ripening stage. • Apply <i>Neem</i> based insecticide 5% with 1% soap solution at flowering stage when eggs and early larval instars are observed. • At podding stage, if the larval population crosses the ETL [> 1 larva/ml] then apply profenophos 50 EC @ 1500 ml/ha, dissolved in 500 liters of water. • In case of heavy infestation and relatively more number of larger instars [3rd onwards] are observed, application of profenophos + cypermethrin combi formulation 44 EC @ one liter/ha is effective. If required rynaxypyr 20 SC @ 75 ml/ha or flubendiamide 48 SC @ 50 ml/ha should be applied to reduce the larval population effectively and economically.

Maharashtra

Varieties	JG-16, Vikas, Vishal, Digvijay, JAKI 9218, KAK 2 (K), Virat (K), PKV-4 (K), Phule G 0517, Raj Vijay Gram 203, Raj Vijay Gram 202
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed • Seed treatment with Ammonium Molybdate @ 1g/kg of seed in the areas of chickpea soyabean cropping system
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, 25 kg/ha ZnSO ₄ , Spray of 2% urea at flowering stage (70 DAS) and 10 days thereafter
Plant Protection	Pest monitoring : <ul style="list-style-type: none"> • Installation of Pheromone traps 5-6 traps/ha (8-10 male moth catches/night for three consecutive days). • Trap crop of marigold • Installation of bird perches – 30 – 50/ha (Remove bird perches at the time of maturity) • Spray of NSKE 5% or Azadirachtin 300 ppm or Qinalphos 25 EC @ 2.0 ml/L at seedling stage for <i>Spodoptera exigua</i> • NPV 250 LE at the time of initiation of flowering for <i>Helicoverpa armigera</i> • Chlorantraniliprole 18.5 SC @ 0.18ml/L at the time of maximum podding.

Rajasthan

Varieties	GNG 1581, RSG 888, RSG 963, GNG 1292 (K), Pratap Chana-1, Akash, GNG 1488, GNG 1499, RSG 973, GNG 1958, GNG 1969, L 555, CSJ 515, GLK 28127
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st fortnight of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed • Seed treatment with Ammonium Molybdate @ 1g/kg of seed in the areas of chickpea soybean cropping system • Seed treatment with (Termite affected area) Fipronil 5SC 10ml/kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage (sprinkler irrigation)
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, 25 kg ZnSO ₄ /ha, Spray of 2% urea at flowering stage (70 DAS) and 10 days thereafter
Plant Protection	Pest monitoring : <ul style="list-style-type: none"> • Installation of Pheromone traps 5-6 traps/ha (6 male moth catches/night). • Trap crop of marigold • Installation of bird perches – 30 – 40/ha (Remove bird perches at the time of maturity) • Spray of NSKE 5%/NPV 250 LE, Indoxocarb 500 ml/ha • Dusting of Quinalphos 1.5% @ 25 kg /ha. for cut worm • Dusting of Methyl parathion (2%) or Malathion(5%) or Carbaryl (5%)@ 25 kg /ha. for pod borer before flowering and after pod formation. • Spray of Quinalphos 25EC @1 lit. Or Malathion 50EC 1.25 lit. At the time of flowering for pod borer. <ul style="list-style-type: none"> • At 50% flowering First spray of NPV 250 LE/ha. and second spray BTK (Dipel 8L) 1.5 lit./ha. after 15 days of First spray for pod borer.

Uttar Pradesh

Varieties	Gujarat Gram-4, HK 2 (K), Pusa Kabuli 1103 (K), IPCK 2002-29, HK 05-169, KWR 108, KPG 59, Pusa 372,
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin)(1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, 25 kg ZnSO ₄ /ha, Spray of 2% urea at flowering stage (70 DAS) and 10 days thereafter
Plant Protection	Pest monitoring : <ul style="list-style-type: none"> • Installation of Pheromone traps 5-6 traps/ha (6 male moth catches/night). • Trap crop of marigold • Installation of bird perches – 30 – 40/ha (Remove bird perches at the time of maturity) <ul style="list-style-type: none"> • Spray of NSKE 5%/NPV 250 LE, Indoxocarb 500 ml/ha • Give 3 sprays of Propiconazole 25 EC(100 ml/acre) at 10 days interval or 3-5 sprays of Mancozeb 75 WP) or Captan or Captaf or Chlorothalonilat 15 days interval in 100 litres of water for the management of Ascochyta blight of chickpea. • Give one spray of Mancozeb 75 WP @ 350 g or Triadimenol or Triadimefon 25 WP @ 200 g in 100 litres of water/acre immediately on appearance of symptoms of Botrytis grey mold in February-March.

Bihar

Varieties	Gujarat Gram 4, GCP 105, HK 2 , HK 05-169, BG 372, KPG 59
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding, if required
Irrigation	One irrigation at pod initiation stage / Sprinkler irrigation
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, Spray of 2% urea at flowering stage and 10 days thereafter
Plant Protection	<ul style="list-style-type: none"> • Give 3 sprays of Propiconazole 25 EC(100 ml/acre) at 10 days interval or 3-5 sprays of Mancozeb 75 WP) or Captan or Captaf or Chlorothalonilat 15 days interval in 100 litres of water for the management of Ascochyta blight of chickpea. • Give one spray of Mancozeb 75 WP @ 350 g or Triadimenol or Triadimefon 25 WP @ 200 g in 100 litres of water/acre immediately on appearance of symptoms of Botrytis grey mold in February-March.

Punjab

Varieties	PBG 5, PBG 7, Arpita, Arpan, Aruna, Abhilasha, Ankur, Anshul, GNG 663, GNG 469, GNG 1581, RSG 888, RSG 963, GNG 1292 (K), Pratap Chana-1, Akash, Asar
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st fortnight of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Treat the seed with Captan or Captaf or Bavistin (carbendazim 50 WP) @ 3 g or Rovral (iprodione) @ 2.5 g per kg seed. • Seed treatment with chlorpyrifos 20EC @ 10 ml /kg seed for termites • Seed treatment with Mesorhizobium (LGR 33) and Rhizobacterium (RB 1) biofertilizers @ one packet each /18 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding, if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, Spray of 2% urea at flowering stage and 10 days thereafter
Plant protection	<ul style="list-style-type: none"> • Give 3 sprays of Propiconazole 25 EC(100 ml/acre) at 10 days interval or 3-5 sprays of Mancozeb 75 WP) or Captan or Captaf or Chlorothalonil at 15 days interval in 100 litres of water for the management of Ascochyta blight of chickpea. The first spray should be given immediately on appearance of the disease. • Give one spray of Mancozeb 75 WP @ 350 g or Triadimenol or Triadimefon 25 WP @ 200 g in 100 litres of water/acre immediately on appearance of symptoms of Botrytis grey mold in February-March. • For the management of wilt, grow wilt tolerant varieties viz; PDG 4, PDG 3, PBG 7, GPF 2, PBG 5, PBG 1 and kabuli varieties BG 1053 and L 552. • To manage stem rot and foot rot, sow the gram crop from October 25 to November 10.
	<ul style="list-style-type: none"> • Termites : Treat the seed before sowing with Dursban (chlorpyrifos 20 EC) @ 10 ml /kg seed. Dilute 180 ml of chlorpyrifos in half litre water and spray the same on 18 kg seed of desi gram spread as a thin layer on tarpaulin or polythene. Use 370 ml of insecticide in 1 litre water for 37 kg seed of kabuli gram. Mix the seed properly and allow drying • Helicovera armigera : The larvae damage the gram crop by feeding on leaves, flower buds, flowers, pods and grains in the pods. Spray 200 ml indoxacarb 14.5 SC or 60 ml spinosad 45 SC or 100 ml Sumicidin/ /Fenlik/Agrofen 20 EC (fenvalerate) or 160 ml Decis 2.8 EC (deltamethrin) or 80 ml Cymbush 25 EC (cypermethrin) in 80-100 litres of water per acre or dust 10 kg Malathion 5% dust (malathion) per acre at the start of pod formation and repeat after two weeks, if necessary.

Haryana

Varieties	Arpita, Arpan, Aruna, Abhilasha, Ankur, Anshul, GNG 663, GNG 469, GNG 1581, RSG 888, RSG 963, GNG 1292 (K), Pratap Chana-1, Akash, Asar
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding, if required
Irrigation	One irrigation at pod initiation stage / Sprinkler irrigation
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, Spray of 2% urea at flowering stage and 10 days thereafter
Plant Protection	<p>Adopt IPM practices against <i>Helicoverpa</i></p> <ul style="list-style-type: none"> • Follow strip cropping of bengalgram with coriander (8:2 or 16:4) • Sow 4 rows of sorghum all round the plot • Transplant 50-100 marigold seedlings all round the plot • Monitoring with pheromone traps @ 10/ha to target the pest • Use bird perches (50/ha) • Use neem formulations for insect repelling (NSKE 5%) soon after the pest occurrence. • Use biocides like Bt @ 1 kg/ha and NPV @ 500 LE/ha twice at an interval of 7-10 days in the evening hours. • If necessary spray chlorpyrifos @ 2.5 ml/l or quinalphos @ 2 ml/l or acephate @ 1.0 g/l. In severe case, spray spinosad @ 0.35 ml/l or Rynaxypyr @ 0.2 ml/l or Indoxacarb @ 1 ml/l. <p><i>Spodoptera exigua</i></p> <ul style="list-style-type: none"> • The incidence of <i>S. exigua</i> generally appears at early vegetative stage i.e., up to 20-30 days after sowing. Larvae damage the lower leaves by scraping. In severe case, foliage will drop down. • Spray either Neem oil 5 ml/lit or monocrotophos @ 1.6 ml/l or acephate @ 1.0 g/l or quinalphos @ 2.0 ml/l or thiodicarb @ 1 g/l. <ul style="list-style-type: none"> • Give 3 sprays of Propiconazole 25 EC(100 ml/acre) at 10 days interval or 3-5 sprays of Mancozeb 75 WP) or Captan or Captaf or Chlorothalonil at 15 days interval in 100 litres of water for the management of Ascochyta blight of chickpea. • Give one spray of Mancozeb 75 WP @ 350 g or Triadimenol or Triadimefon 25 WP @ 200 g in 100 litres of water/acre immediately on appearance of symptoms of Botrytis grey mold in February-March. <ul style="list-style-type: none"> • Cut worm : 80 ml fenvalerate 20EC or 50 ml cypermethrin 25EC Or 150 ml decamethrin 2.8EC in 100 lt. of water per acre. Or 10 kg 0.4D Fenvalerate dust

Jharkhand

Varieties	Birsa Chana 3, Gujarat Gram 4, HK 2 , GCP 105, HK 05-169, BG 372, KPG 59
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding, if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, Spray of 2% urea at flowering stage and 10 days thereafter
Plant Protection	<ul style="list-style-type: none"> • Give one spray of Mancozeb 75 WP @ 350 g or Triadimenol or Triadimefon 25 WP @ 200 g in 100 litres of water/acre immediately on appearance of symptoms of Botrytis grey mold in February-March. • Installation of Pheromone traps 5-6 traps/ha (6 male moth catches/night). • Trap crop of marigold • Installation of bird perches 30 – 40/ha (Remove bird perches at the time of maturity) • Spray of NSKE 5%/NPV 250 LE, Indoxocarb 500 ml/ha • Quinalphos 25 EC 20 ml/10 lit water • Chlorantraniliprole 18.5 SC 2.5 ml/10 lit water <ul style="list-style-type: none"> • Emamectin Benzoate 5 SG 3g/10 lit water

Asam

Varieties	Gujarat Gram 4, BG 372, KPG 59, Pant G 186, GCP 105, HK 2 and HK 05-169
Date of sowing	Rainfed : 1 st fortnight of Oct. Irrigated : Last week of Oct. to 1 st week of Nov.
Spacing	30 x 10 cm (line sowing)
Seed treatments	<ul style="list-style-type: none"> • Seed priming (soaking of seed for 4-5 hours in water) • Seed treatment with Trichoderma (6g/kg) and Vitavax (Carboxin) (1g/kg) • Seed treatment with Rhizobium culture one packet (200 g)/10 kg seed
Weeding	Pre-emergence spray of Pendimethalin @ 1.0-1.25 ai kg/ha. One hand weeding, if required
Irrigation	Two irrigations first at branching and 2 nd at pod initiation stage
Fertilizer application	15-20 kg N, 40 kg P ₂ O ₅ , 20 kg S, Spray of 2% urea at flowering stage and 10 days thereafter
Plant Protection	<ul style="list-style-type: none"> • Give 3 sprays of Propiconazole 25 EC(100 ml/acre) at 10 days interval or 3-5 sprays of Mancozeb 75 WP) or Captan or Captaf or Chlorothalonilat 15 days interval in 100 litres of water for the management of Ascochyta blight of chickpea.