



Crop: Soyabean production guidelines

Climatic requirements: soyabean is a sub tropical plant which requires warm conditions during its life cycle. Suitable climatic conditions for a minimum period of 4-5 months are necessary for economic production.

Irrigation: Soyabean requires reliable rainfall, particularly from flowering through to pod maturity. Supplementary irrigation will ensure adequate moisture during dry spells.

Soil requirements: Soyabean is suited to soils with relatively high clay content as they do not do well in relatively weak sands. Good well drained soils are ideal, since water logging affects crop growth.

Optimum pH-Soyabeans are very sensitive to soil acidity, and for maximum yields the pH must be at least 5.5.

Seed rates: 100kgs/ha, in order to achieve desired plant population.

Planting dates: Ideal planting time is from November to mid December, early planted crop will give better yields.

Plant population: 400 000plants/ha

Target yield: 2 000-4 000kgs/ha

Fertiliser and agrochemical guidelines.

Problem	Product	Rate/ha	Application/General comments

Basal fertiliser	ZFC Cottonfert 5 18 10 or	300-350kgs/ha	Apply before or at planting
	ZFC soya blend 6 27 20	150-200kgs/ha	Apply before or at planting
Foliar Spray	Foliar 15	1-2lt/ha	Apply early during vegetative growth and twice from the onset of flowering
Inoculant	Rhizobium spp	100g	Seed dress before planting at 100g/100kgs seed
Herbicides(pre-emergent)	Metribuzin 480SC	600ml-1.2lt/ha	Apply pre-emergent for broad leaf and some annual grasses(tank mix) with a suitable grass herbicide.
	Dual Magnum 960EC	07-1.5lt/ha	Apply pre-emergent for annual grass weeds and a few broadleaves including yellow nutsedge suppression. (tank mix with Metribuzin for improved broadleaf control)
	Lasso/Alachlor 48EC	2.8-4lt/ha	Apply pre-emergent for annual grass weeds and a few broadleaves including yellow nutsedge suppression (tank mix with Metribuzin for improved broadleaf control).
	Bateleur gold	0.7-1.7lt/ha	Apply pre-emergence for both broadleaves and annual grasses
	Frontier Optima	0.6-1.2lt/ha	Apply pre-emergent for control of annual grasses, suppression of yellow nutsedge and wandering dew. Can be tank mixed with broadleaf herbicide)
	Acetochlor	0.5-1lt/ha	Apply pre-emergent for annual grass weeds and a few broadleaves including yellow nutsedge suppression (tank mix with Metribuzin for improved broadleaf control).
	Authority 480SC	600mls-700mls/ha	Apply pre-emergent for control of sedges including some broad leaves. Tank mix with a suitable annual grass herbicide.
	Prowl CS	2.3-3.3lt/ha	Apply as pre-emergence for the control of Shamva(<i>Rottballea</i> spp), annual grasses and a few broadleaves.
	Clomazone 4 EC	1.5-2.3lt/ha	For the control of annual grasses, volunteer, (wheat and maize), wandering dew and broadleaf weeds.
Herbicides(post-emergent)	Agil 100EC	0.5-2lt/ha	Apply as post emergent(over the top-OTT) for control of annual and perennial grasses. Increase rate for perennial grasses.
	Fusilade forte	0.8lt-6.5lt/ha	Apply as post emergent(over the top-OTT) for control of annual and perennial grasses. Increase rate for perennial grasses.
	Basagran 480	2.5-3.0lt/ha	Apply as post-emergence for the control of broadleaf weeds and yellow nutsedge. Apply after the second trifoliolate leaf stage of crop. (Do not mix with grass herbicides)
	Pursuit(Hammer)	500-700mls	Apply as pre or post emergent(over the top-OTT) for control of a range of a broadleaf herbicides.(Add pursuit booster when applying post emergent). The lower rate is for pre-emergent applications.

	Classic(chlorimuron-ethyl)	30gm/ha	Applied post emergence for the control of broadleaf weeds, suppression of yellow nutsedge, wandering dew and Mexican clover.
Insecticides	Lambda-cyhalothrin	100-150mls/ha	Apply over crop row for cutworm control
	Carbaryl 85WP	1kg/ha	Apply at least 2 sprays for semi-looper control
	Dichlorvos	500mls/ha	Apply at least 2 sprays for semi-looper control
	Thunder	300mls/ha	Apply at least 2 sprays for semi-looper control
Fungicides	Opera	500mls/ha	Rust, Red Leaf blotch and Frog eye, apply at 50 days after crop emergence and repeat application 21 days later, when necessary.
	Folicur	500mls/ha	Rust, apply at 50 days after crop emergence and repeat application 21 days later, when necessary.
	Shavit	500mls/ha	Rust, apply at 50 days after crop emergence and repeat application 21 days later, when necessary.
	Tilt	500mls	Rust, apply at 50 days after crop emergence and repeat application 21 days later, when necessary.
	Score	375mls/ha	Rust, apply at 50 days after crop emergence and repeat application 21 days later, when necessary.
Nematodes			Soyabean are hosts to root knot nematodes and therefore should not be grown in rotation with tobacco, tomatoes, potatoes and sunflower.

General comments: Good yields are achieved when farmers pay attention to detail, factors that contribute to yield include, good land preparation, good variety selection, planting on time , correct and adequate fertiliser application, good plant population, weed control, pests and disease control, and harvesting on time.