



BROCCOLI FERTIGATION

GENERAL

One usually notes 3 development stages in the broccoli crop: a) the young stage; b) the pre curd-forming stage and c) the curd phase. Broccoli life cycle lasts from 65 to 120 days. The soil quality has to be excellent.

The crop responds well to organic fertilizer. Any excess in nitrogen may induce curd of bad quality. The absorption kinetic noticeably varies with seasonal periods. The nitrogen and potassium absorption, and calcium to a less extent, are proportional to fresh material production. The phosphorous, magnesium and sulphur absorption pace is more constant during the whole development.

Broccoli is sensitive to boron and molybdenum deficiency. If the pH value is too low, we face to molybdenum deficiency. On the other hand, a pH superior to 6.8 decreases the risk of molybdenum deficiency and cabbage hernia (*plasmidiophora brassicae*). Finally, the pH should remain below 7.5 in order to prevent any deficiency in boron and manganese. The symptoms of boron deficiency are hollowing of the stem to cracking to the pith, and browning of the corymbs. The last may also occur in case of nitrogen oversupply. Potassium deficiency shorts the internodes and induces pigmentation trouble of the leaf veins, inhibition of curd formation and floral bud.

The crop requires less water than cauliflower, but expected yield is less (30 M.T/ha) as well. It is preferable to avoid any water-stress which may deform the shape and discolours the leaves. The optimal pH turns around 6.8 to 7.5. Phosphorous deficiency leads to browning and hollowing of the stems as well. The symptoms, in that case, are similar to those noted for cauliflower in case of nitrogen excess or boron deficiency. Broccoli crops has high needs in calcium and sulphur



NUTRIENT REMOVAL

Fruits + Leaves

in element /T of fresh material	N	P ₂ O ₅	K ₂ O	MgO	CaO
broccoli	1.8–4.9	0.5–1	5.4–10	3.2	0.4

Borealis L.A.T GmbH, St.-Peter-Straße 25, 4021 Linz, Austria
E-Mail: lat@borealisgroup.com, Phone: +43 732 / 6915-0
www.borealis-lat.com

FERTIGATION ADVICE

Expected yield:

30 T/ha total fertilisers : N: 159 kg/ha – P₂O₅: 129 kg/ha – K₂O: 324 kg/ha

Irrigation	Phenologic stage	Young stage (from plantation to 10 leaves stage)			Beginning of curd- formation stage			Intensive curd formation stage		
	Number of days	10			50			50		
	Fertilising elements	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
	Requirements in fertilising elements	9	27	6	48	48	144	102	54	174
	NPK ratio	1	3	0.7	1	1	3	4	1	4
	Formulation	15*45*10			12*12*36			17*09*29		
	Number of kg/ha	60			400			600		
	Number of kg/ha/day	6			8			12		

Foliar treatment	Phenologic stage	Fomulation	Dosages
	5-6 leaves	SUPREMO L 259 P +Mg+Mn+N	5 l/ha
	8-10 leaves	SUPREMO L 100 B +Mo+S	2.5 l/ha
	Beginning of curd- formation	SUPREMO L 135 Mg +N	3 x 5 l/ha, in case of necessity
Intensive curd- formation stage	SUPREMO L 225 Ca +N+TE	4 x 5 l at 10 days interval	

Notice: Formulae and recommended doses correspond to the plant average needs, cropped on well-balanced soils. They must be adapted to the soil, the climate, the cropping conditions, the variety, the water management and the yield target. Fertigation schedule indicate daily fertilizer requirements per ha. In case of irrigation in time intervals other than daily, the amount of fertilizer to be given has to be increased proportionally. The base dressing (organic and/or mineral) should be deducted from advised recommendations.

Borealis L.A.T GmbH, St.-Peter-Straße 25, 4021 Linz, Austria
E-Mail: lat@borealisgroup.com, Phone: +43 732 / 6915-0
www.borealis-lat.com