

CROP : SUMMER SQUASH – *PEPO*

Trial carried out in Mexico in 2002

INTRODUCTION

About 17000 hectares are grown every year in Mexico. The average yield is about 12.06 Tons/ha. This plant is moderately susceptible to salinity of soil. Due to inadequate fertigation systems, the content in salts may increase. Therefore, it is toxic to plants and it ends up to poor yields.

Tolerance of cucurbitacea to salinity

Plant species	Electric conductivity (dS/m)	Effect
Cucurbitacea	2.2 – 2.5	None
	3.3 – 3.6	Yield reduction of 10 %
	4.4 – 5.7	Yield reduction of 25 %
	> 6.3	Yield reduction of 50 %

TRIAL OBJECTIVE

To evaluate the effects of AMINOFIT products on the physiology of plants grown in soil with problems of salinity

SITE DETAILS

Trial location	Crop information
Villa Guerrero, Mexico	Variety : Pepo Soil type : problems of salinity: 3.9 dS/m Treatments are carried out on 3 rows Assessments are carried out on the central row

TREATMENTS TESTED

Treatment N°	Product	Dose	Volume of water	Mode of application
1	AMINOFIT	5 cc/l	15 l / plot	Foliar spray
2	AMINOFIT.Flowering	5 cc/l	15 l / plot	Foliar spray
3	AMINOFIT + AMINOFIT.Flowering	2.5 + 5 cc/l	15 l / plot	Foliar spray
4	AMINOFIT + AMINOFIT.Flowering	15 + 15 cc/l	100 ml / plant	Drench
5	AMINOFIT.Xtra	15 cc/l	100 ml / plant	Drench
6	Control	-	-	-

3 applications were made: first application 10 to 15 days after planting and then every 15 days

DISCUSSION, CONCLUSION

This test proves that AMINOFIT products have positive effects on the plant metabolism when the soil salinity is high. AMINOFIT.Xtra applied through drench gives the best results.

RESULTS

Studied Parameter	Number of fruits harvested per plant	Yield / ha	% virus infection
AMINOFIT	6.2	11.16	11.00
AMINOFIT.Flowering	5.6	10.08	19.00
AMINOFIT + AMINOFIT.Flowering	5.0	9.00	26.00
AMINOFIT + AMINOFIT.Flowering	3.5	6.3	31.00
AMINOFIT.Xtra	8.0	14.4	22.00
Control	2.8	5.04	22.00

Remarks: the fruits are harvested when they measure 12 to 15 cm long and when they are uniformly dark green coloured

GRAPH

