

BioAktiv for Plants used on field beans – practical results

Place:	„De Schakel“ growers' association with fields on Visvijverweg, Meijel
Period:	May 2013 – July 22, 2013
Crop:	Field beans, „Duet“ variety
Yield:	gross: 11 tonnes/ha
Crop area:	5.35 ha, of this some 2 ha sprayed with BioAktiv for Plants
Type of soil:	Heavy black sandy soil, seed furrow 30 – 35 cm
BioAktiv:	1st spraying: April 19, 2013 before germination, 1 kg BioAktiv for Plants (in 300 l water)/ha 2nd spraying: May 17, 2013, plants 5 – 6 cm tall, 1 kg BioAktiv for Plants/ha
Net yield:	8.3 % more field beans
ROI:	1:4,5

Experimental setup:

The southern wedge-shaped part of the field and its outer edge (2.35 ha) were not treated with BioAktiv, whereas the inner portion (2 ha) was sprayed with BioAktiv for Plants. The field was irrigated once with 40 mm of water from a well.

Three days before the harvest samples were taken by removing and judging plants with roots over a length of 2 m in a row, counting the stems and weighing the total biomass. Then the pods were removed from the stems and weighed in groups. As a last step, the beans were taken from the pods and then judged and weighed.



The experiment was compiled with eight plots. Of these, 4 were untreated and 4 were treated with BioAktiv for plants.

Schematic representation of the acreage

	without		without		BioAktiv		BioAktiv		BioAktiv		BioAktiv		without		without
	1		2		3		4		5		6		7		8

The following data were obtained:

plot	control (g)						BioAktiv (g)					
	1	2	7	8	Sum		3	4	5	6	Sum	
No. of stems	55	41	48	46	190	per stem	53	40	35	48	176	per stem
Biomass plant (without root)	8555	6476	6062	6238	27331	143,85	7983	6207	6205	7444	27839	158,18
Biomass pods	4788	3846	3539	3740	15913	83,75	5053	3731	3688	4294	16766	95,26
Biomass beans (cleaned)						6115						6620
Advantages of BioAktiv	No. of stems				-7,40%		Biomass plant per stem				10,00%	
	Biomass plant				1,90%		Biomass pods per stem				13,70%	
	Biomass pods				5,40%		Biomass beans				8,30%	

The treated plants have a more extensive root system. Also a difference in the root nodule bacteria on the roots can be seen.

with BioAktiv

without BioAktiv

Increase in root nodule bacteria



If you have questions regarding practical use please turn to Michel van den Bergh.