

## **Benefits of using Vermi Compost in Potato Crop**

Chetan Kamal Singh from village Kapeli district Ujjain shared his experience on the use of Vermi compost in the Potato crop . According to Kamal Singh he divided his entire field of 2 Bigha in two equal parts. He decided to apply Vermi Compost and small quantity of Urea in one part and only Urea in the other plot. The details are as under :

- He used 6 quintals home saved seed for sowing on both the plots. The seed variety was Soy Chips.
- First irrigation was done at the time of field preparation where he provided limited water to make it wet and then applied 4 Quintals Compost in The first plot. Next day he performed seed sowing .The distance kept as 15 Inch.
- In the control plot he directly performed sowing without irrigating the same and kept the distance as 15 inch. Vermi Compost was also not used in this plot.
- Seed sowing was done on 31st October 2014 and he observed germination after 11 days in the plot where he applied vermi compost and in the next plot he observed the same after 15 days of sowing.
- Potato crop requires around 6 irrigations in the region. Kamal Singh irrigated first plot on 10 th November 2014 for around three hours and on the same day he irrigated control plot for around 5 hours.
- After 8 days of germination he observed that fresh green leaves in first plot where as in other plot the leaves were light yellow and green.
- The health and average length of plants were good in the first plot than the plants of second plot.
- According to Kamal Singh there were 6-7 branches in the plants of first plot and in the other plot it was found as 3-4 branches in each plant .
- Flowering was observed after 30 days in first plot and in control plot the same was observed after 36 days of sowing.
- He applied 40 kg Urea in first plot in two installments of 20 kg each. In control plot he applied 120 Kg. Urea.
- He observed Potato formation after 25 days in the first plot whereas in the control plot the same was observed after 30 days.
- He applied total 5 irrigations each of for three hours' duration in the first plot and 6 irrigations in the control plot. Here duration of each irrigation was 5-6 hours.
- According to him the crop was ready to harvest on 3<sup>rd</sup> February and in the control plot it took 8 days more.
- He harvested crop from first plot on 25<sup>th</sup> February and received 45 Quintals Potatoes. After 7 days he received 30 Quintals potatoes from control plot.
- The weight of one potato received from first plot was 150 gm. Whereas the same was observed as 70-80 gms in control plot.

### Details of Kamal Singh's Potato cultivation

	First Plot (Vermi Compost+Urea)	Control Plot ( Urea only)	Rimarks
Name of farmer	Kamal Singh		
village	Kapeli		
Location of field	near Mahakal tample		
Size of plot	1 Bigha	1 Bigha	
Crop	Potato	Potato	
Seed variety	Soya chips	Soya chips	
Source of seed	Home saved	Home saved	
Land preparation and Sowing	Irrigated the field for one hour then applied Compost one day prior to sowing. Distance kept as 15 Inch.	Sowing done on the same day in the dry field without applying vermi compost.	4 Quintal per Bigha vermi compost application.
Date of Sowing	31st October 2014	31st October 2014	
Germination	11 days	15 days	
Leaves' colour	Green	light green and yellow mix	
Type of plant	healthy with 6-7 branches in each plant	Comparatively less healthy with 3-4 branches in each plant	
Time of flowering	30 days	36 days	
Colour of Flowers	white	off white	
Potato formation	20 days	29 days	
Per plant Potato count	10 to 12 (Around 1 k.g)	4 to 6 (600 gram)	
Weight of single Potato	150 gram	75 to 100 gram	
Quantity of fertilizer used	Urea 40 k.g.	Urea, 120 k.g	10 days After sowing 20 k.g Urea application & after 35 days 20 k.g Urea application in first plot
Total expenditure on inputs	vermi compost-Rs.500 ,Urea Rs.350 . Total Rs. 850 and spray of Amrit pani ( bio pesticide prepared by farmer) .	3 bag Urea-Rs. 1050, weed control-senkar Rs.550, fungus Control ACTAMA- Rs.150,Lemda- Rs.450(Total Exp.2200)	
Crop ready to harvest	on 3rd Feb 2014	Took almost 8 days more.	
Production	45 qntl.	30 qntls.	



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**Potato (organic farming)**

