

# Management of grassy weeds in wheat using zero tillage technology



Sh. Ashok Mishra

## SUCCESS STORY - 3



Sh. Rajkumar Mishra

SL	PARTICULARS	DETAILS
1	NAME OF THE FARMER	SH.ASHOK MISHRA AND SH. RAJKUMAR MISHRA
2	ADDRESS	
	(i) VILLAGE	Khamaria
	(ii) POST	Ramkhiria
	(iii) TEHSIL	Sihora
	(iv) DISTRICT	Jabalpur
	(v) STATE	Madhya Pradesh
3	CONTACT DETAILS	09752550148/09826162426
4	DETAILS OF FARM (SIZE, WATER AVAILABILITY ETC.)	16 acres with irrigation facilities (tube well) and Canal
5	MEMBERSHIP IN SELF-HELP GROUP, PRODUCERS, COOPERATIVE SOCIETY / COMPANY ETC.	Cooperative Society Ghat Simariya and SBI Kisan Credit card, Sihora
6	NAMES OF THE CENTRAL SECTOR/ STATE SCHEMES UTILIZED BY THE FARMER AND THE PERIOD	Weed control technologies transferred by Directorate of Weed Science Research (DWSR), ICAR, Jabalpur, being adopted since last five years

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7	<b>TECHNOLOGIES / GOOD AGRICULTURAL PRACTICES/ FACILITIES / BENEFITS OBTAINED WITH DETAILS</b>	Management of Phalaris minor and other grassy weeds in wheat using zero tillage technology with recommended herbicide (metsulfuron 4 g/ha) as tilling land is a laborious and time-consuming operation. It has been estimated that on an average about 30% of the total expenditure of crop production is incurred on tillage operation	
8	<b>DETAILS OF RESULTS OBTAINED DUE TO THE ADOPTION OF TECHNOLOGIES (RESULTS ACHIEVED)</b>	<b>Improved/ Present production technologies</b>	<b>Traditional/ past production practices</b>
(I)	TECHNIQUES ADOPTED FOR WEED MANAGEMENT	zero tillage and Almix at 4 gm ai/ha	conventional tillage and no weeding operation
(II)	PRODUCTIVITY PER HECTARE	32 q/ha	23 q/ha
(III)	COST OF PRODUCTION PER HECTARE	Rs 9000/ ha	Rs. 11000 (Inclusive of conventional tillage practice)
(IV)	TOATL GROSS INCOME PER HECTARE	Rs. 32000 per hectare (32 q X Rs. 1000/ q)	Rs. 21850 (23 q X Rs. 950/ q less price as there was impurities like weed seeds)
(V)	NET INCOME PER HECTARE	Rs. 23000	Rs. 10850
(VI)	PRICE REALIZED (RS. PER TON)	Profit - Rs. 7600/ton Cost Rs. 2250/ton	Profit-Rs.4717/ton Cost-Rs.4782/ton
(VII)	NATURAL RESOURCES SAVED/ CONSERVED LIKE SOIL, WATER ETC.	<ul style="list-style-type: none"> <li>• Saved one irrigation that is given at the time of land preparation in traditional method.</li> <li>• Saved fuel (diesel), time and ploughing as it did not require land preparation.</li> </ul>	Did not save any natural resources





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(II)	PRODUCT QUALITY IMPROVEMENT	<p>The produce was free from weed seeds and grain was bold.</p> <p>The quality of the farm produce was much contaminated with objectionable weed seeds along with irregular grain size</p>
9	<b>MARKETING STRATEGY ACCESS TO MARKET (THROUGH PRIVATE, COOPERATIVE, CONTRACT FARMING ETC.)</b>	Farm produce, obtained is marketed through Sehkari Samiti Maryadit Sakha operating at the block level
10	<b>FACTORS CONTRIBUTING TO SUCCESS</b>	<ul style="list-style-type: none"> <li>Zero tillage technology with recommended herbicides resulted in conserving the soil moisture, saving fuel, no costs for land preparation, significant weed control, time saving and timely sowing of wheat. Risk of pests was significantly reduced. As a result of obtained higher yields and profit.</li> </ul>
11	<b>ANY OTHER RELEVANT INFORMATION</b>	<ul style="list-style-type: none"> <li>The farmers of nearby villages visited the zero tillage fields and were surprised to see the fantastic performance of zero tillage with recommended herbicides and are showing their inclination to adopt the technology.</li> <li>With the escalation in diesel price, the cost of production for wheat has increased. In M.P. nearly 1.06 m ha area in wheat is under rice-wheat cropping system, which requires approximately 89.38 million litres of diesel for land</li> </ul>

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preparation. If only 10 % area is put under ZT planting, there can be a saving of Rs. 154.25 millions per year. Besides, this new technology is eco-friendly by reducing 195 kg C02/ha (assuming 2.6 kg C02 production/litre of diesel burnt), which is one of the major causes of global warming.



**Zero-till seed-cum-fertilizer drill**



**Zero-till drilled wheat**