



Mahatma Phule Krishi Vidyapeeth, Rahuri

Paddy

Recommendation released in last 10 years

2019-20	1	<p>In sub montane zone of Maharashtra, to obtain the higher returns of transplanted summer paddy following package of practice is recommended.</p> <ul style="list-style-type: none"> ➤ Line sowing of seeds of variety Phule Samruddhi in first fort night of December on raised bed in nursery. ➤ Transplanting of 25-30 days old, 2-3 seedlings per hill at 15-25 x 15-25 cm distance as controlled transplanting. ➤ Application of 170 Kg Urea -DAP briquette (60:30:0) + 50 Kg K₂O or 125 Kg N: 62.5 Kg P₂O₅: 62.5 Kg K₂O through straight fertilizer per hectare.
	2	<p>Since, 1996-97 to 2015-16, the increase in Minimum Support Prices (MSPs) of Bajra, Paddy and Wheat were less than the increase in inputs prices by 23, 27 and 48 per cent, respectively. Therefore, it is recommended that there is need to maintain the parity between Minimum Support Prices (MSPs) and input prices in order to safeguard the interest of cereal producers of Maharashtra.</p>
2018-19	3	<p>The increase of 16 and 26 per cent in employment, 15 and 26 per cent in the output, 12 and 29 percent in income levels while reduction of 4 and 7 per cent in the per quintal cost of cultivation in medium over low and high over medium adoption group, respectively was the result of adoption of recommended package of practices for paddy cultivation. For the cost reduction and output maximization, it is recommended that the farmers shall adopt the recommended package of practices.</p>
2017-18	4	<p>The pre emergence application of 1500 ml Pretilachlor 30.7 % EC per hectare within 2 to 3 days after sowing and post emergence application of 70g azimsulfuron 50% DF @ 0.035 kg per hectare at 25 days after sowing in 500 liters of water is recommended for effective control of weeds and higher economical returns in drilled paddy cultivation of Sub Montane Zone of Maharashtra</p>
	5	<p>The post emergence application of 200 ml Bispyribac Sodium 10% SC per hectare in 500 liters of water at 15-20 days after transplanting with one hand weeding at 45 days after transplanting is recommended for effective control of weeds and higher economical returns in transplanted paddy of Sub Montane Zone of Maharashtra</p>
	6	<p>A module for integrated management of sheath blight and stem rot of paddy is recommended as below.</p> <ul style="list-style-type: none"> ➤ Seed treatment with carbendazim 50% WP @ 3 g followed by <i>Trichoderma harzianum</i> + <i>Pseudomonas fluorescens</i> mixture @ 5 g each kg⁻¹ seed. ➤ Soil application of <i>Trichoderma harzianum</i> + <i>Pseudomonas fluorescens</i> mixture @ 25 g each + Rice <i>palinj</i> (i.e. empty glumes) ash @ 100 kg / R in nursery. ➤ Recommended dose of fertilizers i.e. RDF (NPK: 100:50:50 kg/ha) with or without use of briquettes. ➤ Three sprays of <i>Pseudomonas fluorescens</i> (0.2%) at 25, 35 and 45 days after transplanting. ➤ Need based 1 to 2 sprays of propiconazole 25 % EC @ 10 ml / 10 L water at 15 days interval if incidence of sheath blight and/or stem rot disease is noticed.



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	7	<p>The percentage increase in medium over low and high over medium adoption group, respectively in employment, production, income levels and reduction in per quintal cost was the result of adoption of recommended package of practices of MPKV, Rahuri for major cereals is as below</p> <p style="text-align: right;">(Figures in Per-cent)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th rowspan="2">Crop</th> <th rowspan="2">Technology Adoption Group</th> <th colspan="3">Increase in</th> <th rowspan="2">Reduction in Cost of cultivation</th> </tr> <tr> <th>Employment</th> <th>Production</th> <th>Income</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Paddy</td> <td>Medium over Low</td> <td style="text-align: center;">16</td> <td style="text-align: center;">15</td> <td style="text-align: center;">12</td> <td style="text-align: center;">4</td> </tr> <tr> <td>High over Medium</td> <td style="text-align: center;">26</td> <td style="text-align: center;">26</td> <td style="text-align: center;">29</td> <td style="text-align: center;">7</td> </tr> <tr> <td rowspan="2">Wheat</td> <td>Medium over Low</td> <td style="text-align: center;">19</td> <td style="text-align: center;">24</td> <td style="text-align: center;">27</td> <td style="text-align: center;">4</td> </tr> <tr> <td>High over Medium</td> <td style="text-align: center;">27</td> <td style="text-align: center;">38</td> <td style="text-align: center;">29</td> <td style="text-align: center;">19</td> </tr> <tr> <td>Rabi</td> <td>Medium over Low</td> <td style="text-align: center;">10</td> <td style="text-align: center;">13</td> <td style="text-align: center;">9</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Jowar</td> <td>High over Medium</td> <td style="text-align: center;">24</td> <td style="text-align: center;">56</td> <td style="text-align: center;">47</td> <td style="text-align: center;">9</td> </tr> <tr> <td rowspan="2">Bajra</td> <td>Medium over Low</td> <td style="text-align: center;">27</td> <td style="text-align: center;">28</td> <td style="text-align: center;">16</td> <td style="text-align: center;">11</td> </tr> <tr> <td>High over Medium</td> <td style="text-align: center;">31</td> <td style="text-align: center;">34</td> <td style="text-align: center;">19</td> <td style="text-align: center;">19</td> </tr> </tbody> </table> <p>For the cost reduction and output maximization, it is recommended that the farmers needs to adopt the recommended package of practices of Paddy, Wheat, Rabi Sorghum and Bajra crops.</p>	Crop	Technology Adoption Group	Increase in			Reduction in Cost of cultivation	Employment	Production	Income	Paddy	Medium over Low	16	15	12	4	High over Medium	26	26	29	7	Wheat	Medium over Low	19	24	27	4	High over Medium	27	38	29	19	Rabi	Medium over Low	10	13	9	2	Jowar	High over Medium	24	56	47	9	Bajra	Medium over Low	27	28	16	11	High over Medium	31	34	19	19
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	8	<p>University paddy recommended technology is cent per cent adopted in College Development Block through Method demonstration, Result demonstrations and Group discussion. These extension methods should be replicated in other paddy growing areas for increasing adoption of recommended technology.</p>																																																						
2016-17	9	<p>In the changing climate situation, during late onset of monsoon in transplanted paddy cultivation of submontane and ghat zone of Maharashtra, for sustainable economical yield, following nursery and transplanting management is recommended.</p> <ol style="list-style-type: none"> 1) In the paddy nursery, raised beds of 1 m breadth, 15 cm height and as per the length required are prepared. 2) The sowing of seeds should be carried out in the line as per the commencement of rains. <p>For transplanting, the age of the seedling should be up to 25 days old.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="text-align: center;">Sowing the seeds in the nursery</th> <th style="text-align: center;">Transplanting the seedlings in the field</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">First week of June</td> <td style="text-align: center;">Fourth week of June</td> </tr> <tr> <td style="text-align: center;">Third week of June</td> <td style="text-align: center;">Second week of July</td> </tr> <tr> <td style="text-align: center;">First week of July</td> <td style="text-align: center;">Fourth week of July</td> </tr> </tbody> </table>	Sowing the seeds in the nursery	Transplanting the seedlings in the field	First week of June	Fourth week of June	Third week of June	Second week of July	First week of July	Fourth week of July																																														
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	10	<p>Application of silicon 300 kg ha⁻¹ through 10 t paddy straw or 1 t rice husk ash or 4.3 t rice husk before transplanting along with GRD (10 tonnes FYM ha⁻¹, 56 kg N & 30 kg P₂O₅ through Urea-DAP briquettes & 50 kg k₂O ha⁻¹) is recommended for higher yields & monetary returns of lowland paddy in Western Ghat Zone of Maharashtra.</p>																																																						
	11	<p>It is recommended to transplant paddy from 2nd fortnight of June to 2nd fortnight of July with three sprays of carbendazim @ 10 g per 10 L water as indicated below for management of leaf and neck blasts, sheath rot, brown spot and seed discolouration diseases and thereby increasing the grain and straw yields as well as monetary return</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="text-align: center;">Spray</th> <th style="text-align: center;">Crop stage</th> <th style="text-align: center;">Days after transplanting</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">First</td> <td style="text-align: center;">Leaf blast appearance in tillering stage</td> <td style="text-align: center;">30 to 35 days</td> </tr> <tr> <td style="text-align: center;">Second</td> <td style="text-align: center;">Sheath formation stage</td> <td style="text-align: center;">55 to 60 days</td> </tr> <tr> <td style="text-align: center;">Third</td> <td style="text-align: center;">Panicle emergence stage</td> <td style="text-align: center;">70 to 75 days</td> </tr> </tbody> </table>	Spray	Crop stage	Days after transplanting	First	Leaf blast appearance in tillering stage	30 to 35 days	Second	Sheath formation stage	55 to 60 days	Third	Panicle emergence stage	70 to 75 days																																										
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2015-16	12	The application of Urea-DAP and MOP briquettes, (56:30:30 N:P ₂ O ₅ :K ₂ O kg ha ⁻¹ ; 220 kg briquettes ha ⁻¹) after transplanting is recommended for higher yield and returns of lowland paddy in Western <i>Ghat</i> Zone of Maharashtra.																																																																	
	13	The application of borax @ 5 kg ha ⁻¹ at the time of transplanting with general recommended dose of nutrients (10 t FYM ha ⁻¹ , 56 kg N and 30 kg P ₂ O ₅ through Urea-DAP briquettes (170 kg) and 50 kg K ₂ O ha ⁻¹) is recommended in boron deficient soils of Western <i>Ghat</i> Zone of Maharashtra for higher yield and returns of lowland paddy.																																																																	
	14	<p>Drip irrigation with 100 % ETC water at alternate day with fertigation of recommended dose (120 : 60: 60 kg N,P₂O₅ and K₂O ha⁻¹) in the form of water soluble fertilizers in 12 weekly splits as per following schedule is recommended for higher productivity, net returns, efficient water and nutrient use for direct seeded paddy on BBF in medium deep soils of Western Maharashtra.</p> <p>Irrigation quantity applied to paddy using drip</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">S. N.</th> <th style="text-align: center;">Month</th> <th style="text-align: center;">Water requirement (lit/day/emitters)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">June</td> <td style="text-align: center;">1.7</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">July</td> <td style="text-align: center;">2.5</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">August</td> <td style="text-align: center;">2.9</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">Sept</td> <td style="text-align: center;">2.5</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">October</td> <td style="text-align: center;">2.7</td> </tr> </tbody> </table> <p>Fertilizer Schedule: Per cent nutrients to be applied in 12 weekly splits</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Days after sowing</th> <th colspan="2" style="text-align: center;">Nitrogen (N)</th> <th colspan="2" style="text-align: center;">Phosphorus (P)</th> <th colspan="2" style="text-align: center;">Potassium (K)</th> </tr> <tr> <th style="text-align: center;">%</th> <th style="text-align: center;">Kg/ha</th> <th style="text-align: center;">%</th> <th style="text-align: center;">Kg/ha</th> <th style="text-align: center;">%</th> <th style="text-align: center;">Kg/ha</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">01-21 (3 weeks)</td> <td style="text-align: center;">40</td> <td style="text-align: center;">48</td> <td style="text-align: center;">40</td> <td style="text-align: center;">24</td> <td style="text-align: center;">35</td> <td style="text-align: center;">21</td> </tr> <tr> <td style="text-align: center;">22-42 (3 weeks)</td> <td style="text-align: center;">30</td> <td style="text-align: center;">36</td> <td style="text-align: center;">30</td> <td style="text-align: center;">18</td> <td style="text-align: center;">25</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: center;">43-63 (3 weeks)</td> <td style="text-align: center;">15</td> <td style="text-align: center;">18</td> <td style="text-align: center;">20</td> <td style="text-align: center;">12</td> <td style="text-align: center;">25</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: center;">64-91 (3 weeks)</td> <td style="text-align: center;">15</td> <td style="text-align: center;">18</td> <td style="text-align: center;">10</td> <td style="text-align: center;">06</td> <td style="text-align: center;">15</td> <td style="text-align: center;">09</td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">100</td> <td style="text-align: center;">120</td> <td style="text-align: center;">100</td> <td style="text-align: center;">60</td> <td style="text-align: center;">100</td> <td style="text-align: center;">60</td> </tr> </tbody> </table>	S. N.	Month	Water requirement (lit/day/emitters)	1	June	1.7	2	July	2.5	3	August	2.9	4	Sept	2.5	5	October	2.7	Days after sowing	Nitrogen (N)		Phosphorus (P)		Potassium (K)		%	Kg/ha	%	Kg/ha	%	Kg/ha	01-21 (3 weeks)	40	48	40	24	35	21	22-42 (3 weeks)	30	36	30	18	25	15	43-63 (3 weeks)	15	18	20	12	25	15	64-91 (3 weeks)	15	18	10	06	15	09	Total	100	120	100	60	100
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2014-15	15	The pre emergence herbicide application of 640 ml oxyflourfen 23.5% EC @ 0.150 kg a.i./ha within 2 to 3 days after sowing and post emergence application of 20 g ready mix of metsulfuron methyl 10% + chlorimuron ethyl 10% WP @ 0.004kg a.i./ha at 25 days after sowing in 500 liters of water is recommended for effective control of weeds and higher economical returns in drilled paddy of Sub montane Zone of Maharashtra																																																																	
	16	The herbicide application of 20 g ready mix of metsulfuron methyl 10% + chlorimuron ethyl 10% WP @ 0.004 kg a.i./ha in 500 liters of water at 15-20 days after transplanting with one hand weeding at 45 days after transplanting is recommended for effective control of weeds and higher economical returns in transplanted paddy of Sub montane Zone of Maharashtra																																																																	
2013-14	17	The drilling of paddy at 30 cm spacing followed by application of 75 per cent recommended dose (75: 37.5: 37.5 NPK kg per hectare = 130.5 kg Urea, 82.5 kg DAP and 62.25 kg MOP per hectare) through 2.7 gram briquette of Urea-DAP-MOP (1,01,944 briquettes per hectare) each at 16 cm distance in alternate row at 5-7 cm depth is recommended for higher economical yield of drilled paddy cultivation in Sub-montane Zone of Maharashtra.																																																																	



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	18	Pre emergence application of 15 milliliter oxyflourfen 23.5% EC per 10 liters of water within two-three days after sowing for control of weeds in paddy nursery is recommended for Submontane Zone of Maharashtra.
2011-12	19	In Western Ghat Zone of Maharashtra for obtaining maximum monetary benefits under receding soil moisture condition in relay cropping after paddy, sowing of Linseed with 75 % of recommended dose of fertilizer (19.00: 38.00: 00 kg N and P ha-1) is recommended.
2009-10	20	Transplanting of paddy seedlings at two leaves stage (14 days old) is recommended for sub mountane zone of Maharashtra for higher yield and monetary returns.