

S. No.	Particulars	Details/Information																																																																											
1	Technology	<b>Integrated Nutrient Management for Export Oriented Vegetable Crops in the Nilgiris</b>																																																																											
2	Authors	<b>D.V. Singh, V. Selvi and M. Madhu</b>																																																																											
3	Developed for arable or non-arable lands	Arable lands																																																																											
4	Period of experimentation	<b>2005 to 2009</b>																																																																											
5	Description/specifications in brief (e.g. package of practices, etc.)	<p>Farmers who are into the cultivation of export oriented vegetable crops like brussels sprout, lettuce and broccoli can select any one of the following options of integrated nutrient management for achieving higher crop yield and ensuring better soil health and conservation in the Nilgiris.</p> <table border="1"> <thead> <tr> <th rowspan="3">Option</th> <th rowspan="3">FYM (t/ha per year)</th> <th colspan="3">Brussels sprout</th> <th colspan="3">Lettuce</th> <th colspan="3">Broccoli</th> <th rowspan="3">Lime, Bio-fertilizers, CRR</th> </tr> <tr> <th colspan="9">NPK (kg/ha) through straight fertilizers as N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O</th> </tr> <tr> <th>N</th> <th>P</th> <th>K</th> <th>N</th> <th>P</th> <th>K</th> <th>N</th> <th>P</th> <th>K</th> </tr> </thead> <tbody> <tr> <td>I</td> <td>15.0</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td rowspan="4">Lime @ 5 t/ha per year, Phosphobacteria and Azospirillum each @ 37.5 kg/ha per crop and recycling of crop residue of the preceding crop</td> </tr> <tr> <td>II</td> <td>9.0</td> <td>37.5</td> <td>37.5</td> <td>25.0</td> <td>12.5</td> <td>25.0</td> <td>7.5</td> <td>20.0</td> <td>25.0</td> <td>25.0</td> </tr> <tr> <td>III</td> <td>6.0</td> <td>75.0</td> <td>75.0</td> <td>50.0</td> <td>25.0</td> <td>50.0</td> <td>15.0</td> <td>40.0</td> <td>50.0</td> <td>50.0</td> </tr> <tr> <td>IV</td> <td>3.0</td> <td>112.5</td> <td>112.5</td> <td>75.0</td> <td>37.5</td> <td>75.0</td> <td>22.5</td> <td>60.0</td> <td>75.0</td> <td>75.0</td> </tr> </tbody> </table>	Option	FYM (t/ha per year)	Brussels sprout			Lettuce			Broccoli			Lime, Bio-fertilizers, CRR	NPK (kg/ha) through straight fertilizers as N, P <sub>2</sub> O <sub>5</sub> and K <sub>2</sub> O									N	P	K	N	P	K	N	P	K	I	15.0	-	-	-	-	-	-	-	-	-	Lime @ 5 t/ha per year, Phosphobacteria and Azospirillum each @ 37.5 kg/ha per crop and recycling of crop residue of the preceding crop	II	9.0	37.5	37.5	25.0	12.5	25.0	7.5	20.0	25.0	25.0	III	6.0	75.0	75.0	50.0	25.0	50.0	15.0	40.0	50.0	50.0	IV	3.0	112.5	112.5	75.0	37.5	75.0	22.5	60.0	75.0	75.0
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6	Importance/sale value	In the Nilgiris, soil acidity, a major limitation of soil quality and soil erosion, a major land degradation process affect the yield of most of the vegetable crops grown in this area. Cultivation of export oriented vegetable crops is both remunerative and high risk involving enterprise. This warrants adoption of proper soil management and conservation practices.																																																																											
7	Outcome and domain area of application of the technology	For cultivation of export oriented vegetable crops like Brussels sprout, lettuce and broccoli, Integrated Nutrient Management (INM) involving the use of inorganic fertilizers, bio-fertilizers, FYM and lime along with crop residue recycling proved to be the best option for sustainable soil health maintenance, high crop productivity and high soil and water conservation efficiency in the Nilgiris.																																																																											
8	Title of the approved project/assignment with Scientific team	<b>Soil health, productivity and conservation under different nutrient management systems for export oriented vegetable crops in the Nilgiris (Ad-hoc scheme of ICAR)</b> <b>D.V. Singh, V. Selvi and M. Madhu</b>																																																																											
9	Scanned copy of one good photograph which can reflect the technology																																																																												