

**Guiding**  
**The System of Rice Intensification (SRI)**  
***Tan Duc Commune – Summer rice 2017***

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**1. Advantages of SRI:**

Save 90% of rice seed, 40% water, reduce 50% of the transplanting time, easy to weed, reduce 30-90 % pesticide and diseases, reduce 30% of chemical fertilizers, increase productivity by 20-30%, increase the quality of rice, protect environment.

**2. The suitability of SRI**

- **Rice varieties:** applicable to all rice varieties
- **Rice crops:** applicable to all rice crops.

**3. SRI technical process in season crop 2017**

- **Time of Sowing:** 10-20 June 2017
- **Time of transplanting:** 20-30 June 2017

▪ ***Preparing seedlings***

- It is encouraged to prepare the seedlings in groups of 3-10 households. Selecting experienced household in preparing seedlings to prepare seedlings for the whole group will ensure the same time of transplanting, equal quality, not adulterated, reduce pests, and save working time. Other households register for seedlings and pay for the costs of seeds, working time and fertilizer as agreed by the group.
- Quantity of rice seeds: 0.3-0.4 kg rice seeds for 1 sao of rice (0.2-0.3 kg for Thau Dau sticky rice); Sowing sparsely: 1 kg of seed is sowed on transplanting soil of 8-10 m<sup>2</sup>.
- Removing unfilled grains: Mix pond mud into water, drop chicken egg until the egg floats for 1 cm; add rice seeds, mix well, remove unfilled grains floating on the surface of water, then clean rice seeds. .
- Soak the seeds with warm water (ratio of 3 boiling + 2 cold), in 40-48 hours, replace 1 warm water every 8 hours.
- Incubate, mix well when changing water. When seeds germinate with the same length as the rice seed, sow them.
- Soil for sowing: make flat soil, fertilize 30 kg of manure + 2-3 kg of phosphate or 5-7 kg of microorganic organic fertilizer for 10 m<sup>2</sup> of land, mix well.
- Raise seed beds to avoid flooding, make drainage around beds
- Sow seeds evenly, sinking germinated seeds

- Should be sown in the late afternoon, cover with nylon over night to prevent the rain from dripping, and remove the nylon the next morning.

▪ ***Land preparation, seedlings age, sowing density, sowing method, water regime:***

<b><i>Land preparation</i></b>	<p>Make soil thoroughly, flat</p> <p>Making small canals around beds and creating canals among rice area are very important. After harrowing in the last time, after 8 to 10 hours, use a bag of which a half is filled with soil, pull it to create deep canal of 10 – 15 cm deep. The distance among rice band is 1,5 – 2m. the direction of the canal or rice band should be in the direction of the wind.</p>
<b>Seedlings age</b>	<p>Common rice variety: 2,0 – 2,5 leaves (10 – 12 days old)</p> <p>Thau Dua, Cai Hoa Vang sticky rice variety: 3.5 – 4 leaves (15-20 days old)</p>
<b>Tansplanting Density</b>	<p>Transplant based on square</p> <ul style="list-style-type: none"> <li>- Normal rice: 25 cm x 25 cm x 1 seedling</li> <li>- Sticky rice (thầu dầu): 30 cm x 30 cm x 1 seedling</li> </ul> <p>Transplanting in both large and tiny lines can be applied as follow: 2 rows are 20 apart, then 30 cm apart, then 20 cm again; or: transplanting 2 rows which are 20 cm apart, leave 1 line blank, then continue transplanting.</p>
<b>Transplanting</b>	<ul style="list-style-type: none"> <li>- Taking seedlings into pots and bring to the field, separate each seedling with soil and put down on the field mud</li> <li>- Transplant in a straight line for easier weeding. Transplant in band, leave the canal of 40 cm to make a convenient way to visit the field, fertilize, watering ...</li> </ul>

▪ **Fertilizer**

Type of fertilizer	Amount of fertilizer (kg/sào)	Fertilizing method				
		When harrowing the last time	After transplanting for 8-10 days	After period 1 for 10 days	When the rice start booting	When rice starts flowering
Manure	200-400	All	0	0	0	0
If using chemical fertilizer						
Superphosphate	15-20	all	0	0	0	0
Urea	6-8	2	2 - 2.5	1	1-1.5	1
Kali	4-5	0.5-1	0.5-1	1	1	1
If using Que Lam microorganic organic fertilizer						
Que Lam micro-bio organic fertilizer	200-250					
Que Lam micro mineral organic fertilizer	150	180			180	

▪ Weeding with rake, absolutely no herbicide

- The 1<sup>st</sup> time: 10 days after transplanting, combining fertilizing the first time
- The 2<sup>nd</sup> time: After weeding the 1<sup>st</sup> time for 10 days combining fertilizing the second time, If possible, weeding the 3<sup>rd</sup> time is encouraged.

▪ **Water management:**

Since transplanting until standing rice, only keep the water on the field of 1 cm. When the rice is standing, remove the water from the field and dry the field with the same signs as the bird's legs for 1 week, keep the water level at the surface of the field until the rice field until rice filled. Do the drainage after heading for 15 days. When fertilizing, farmers can leave water 2-3 cm deep to dissolve the fertilizer, after fertilizing for a week, remove it to the surface, or let water – dry alternately.

Note: repair irrigation system, drainage. After heading for 15 days, let water out of the whole field to prepare for growing potato in the winter crop.

- **Pest and disease prevention:**

Apply the Integrated Pest Management (IPM). On the basis of the synchronous application of measures such as the good soil preparation, flat fields, sowing in accordance with seasonal calendar, using certificated seeds of high uniformity, reasonable density, balanced fertilization and good water management will help the plant to be healthy, resistant to pests and diseases. Regularly check the field to detect pests and diseases timely to take appropriate measures. In the case of compulsory use of pesticides, it is necessary to select medicines of biological origin and herbs.