

CULTIVATION GUIDELINES FOR THUY HUONG 308 HYBRID RICE VARIETY

(Applicable in Vietnam - for reference only)

I. ORIGIN: Thuy Huong 308 is a three-line hybrid rice variety developed by Thuy Hang Seed Co., Ltd., China, then produced and distributed in the Vietnamese market by Vinaseed. The variety features high yield potential, broad adaptability, lodging resistance, moderate resistance to major pests and diseases, as well as translucent rice grains that yield aromatic, soft, and flavorful cooked rice.

II. VARIETAL CHARACTERISTICS

- It is a photo-thermo insensitive variety, adaptable to both major cropping seasons.
- Growth Duration: Northern Region: Spring crop: 130–135 days; Main crop: 105–110 days (shortened by 3–5 days if direct-seeded). North Central Region: 3–5 days shorter than in the Red River Delta. South Central Region: Winter-Spring crop: 110–115 days; Summer-Autumn crop: 100–105 days.
- **Plant height:** 110–115 cm, features high tillering capacity and a compact plant architecture. Flag leaves are erect, v-shaped (concave), and dark green. Panicles are large and long (28–30 cm) with 250–270 grains per panicle; 1,000-grain weight is 29–30 grams. Grains are long, translucent with low chalkiness. Cooked rice is aromatic, soft, white, and flavorful. The variety shows low susceptibility to major pests and diseases.
- Average yield sits at 8.0–8.5 tons/ha, reaching up to 9.0–10.0 tons/ha under high-input intensive farming.

III. TECHNICAL REQUIREMENTS

- **Soil and Land Requirements:** The variety is suitable for medium (flat) and medium-low land, highly fertile, and optimized for moderate-to-high intensive farming practices.
- **Cropping Season and Schedule:** Planting schedules should follow guidelines from local agricultural authorities. The following historical cropping calendar serves as a reference:
 - + Red River Delta and Northern Midland: For the late Spring segment, sow the nursery from January 20 to February 5. Transplant seedlings at the 3–3.5-leaf stage for tray/wet-bed dense nurseries, or at the 4–4.5-leaf stage for traditional dry-bed nurseries.
 - + North Central Region: For the Spring crop, sow from January 10 to January 31 and transplant at the 3–3.5-leaf stage for wet-bed dense nurseries (or the 4–4.5-leaf stage for traditional dry-bed nurseries). For the Summer-Autumn crop, sow from May 15 to June 5 and transplant seedlings at 12–15 days of seedling age.
 - + South Central Region: For the Winter-Spring crop, direct seeding is performed from December 20 to January 15; for the Summer-Autumn crop, direct seeding is performed from May 20 to June 5.
- **Seed Soaking and Incubation:** For the Main crop, soak the seeds in water for approximately 10–12 hours; for the Spring crop, soak for 14–16 hours. During soaking, change the water every 3–4 hours. Afterward, remove unfilled and half-filled grains, rinse thoroughly to eliminate any sourness, and then proceed to incubation for germination. During incubation, regularly check the moisture level; if the seeds

are dry, sprinkle sufficient water to maintain adequate moisture. Once the seeds uniformly show cracking, spread them thinly and maintain moisture to ensure uniform sprouting. Strictly avoid water logging, and do not incubate seeds in plastic bags, woven polypropylene sacks, or directly on concrete floors.

Note: Schedule the cropping calendar appropriately to ensure that the air temperature during the flowering (heading) stage remains between 25°C and 35°C, with atmospheric humidity not lower than 70%, and the fields must be well-irrigated.

- **Planting Density:** 35–40 hills/m², 1–2 seedlings/hill, and shallow transplanting.

- **Fertilizer Management:** To achieve high yields, fertilizer application must be balanced, intensive, and early. The use of compound NPK fertilizers is highly recommended for both basal and top-dressing applications. Application rates should be adjusted based on soil types; the following regime is recommended for medium land:

- **Fertilizer Management:** to achieve high yield, apply fertilizers in a balanced, concentrated, and timely manner, with emphasis on early fertilizer application. Specialized compound NPK fertilizers are recommended for basal and top-dressing applications. Fertilizer rates should be adjusted according to soil type and fertility. The following recommendation applies to medium-fertility soils:

Using Lam Thao NPK Fertilizer:

- **Basal application** (before final harrowing): 7–8 tons/ha of organic fertilizer (or 1,200–1,500 kg/ha of bio-organic/microbial fertilizer) + 560–700 kg/ha of NPK (5:10:3).
- **Early top-dressing (at the tillering initiation/recovery stage):** 280–320 kg/ha of NPK (12:5:10) + 40 kg/ha of urea.
- **Panicle initiation top-dressing:** 200 kg/ha of NPK (12:5:10).
- For simple fertilizer:

Fertilizer type	Unit	Spring season			Main crop, Summer-autumn crop		
		1 ha	360 m ²	500 m ²	1ha	360 m ²	500 m ²
Organic fertilizer	tons	7-8	0,25-0,3	0,35-0,4	7-8	0,25-0,3	0,35-0,4
Urea fertilizer	kg	240-280	8,5-10	12-14	220-250	8-9	11-12,5
Superphosphate	kg	450-500	16-18	23-25	450-500	16-18	23-25
Potassium chloride	kg	160-180	6-6,5	8-9	190-210	7-7,5	9,5-10,5

- **Application Method:** Basal application: Apply 100% of organic or microbial fertilizer, superphosphate, 40% of urea, and 20% of potassium chloride. Early top-dressing (at the tillering initiation/recovery stage): Apply 50% of urea and 30% of potassium chloride. Panicle initiation top-dressing (at the stem elongation stage): Apply the remaining fertilizer amounts.

- **Crop Management:** Maintain adequate water, perform timely gap-filling, and apply early top-dressing to promote early and synchronized tillering. This ensures balanced development, maximizes productive panicles, and minimizes pest and disease incidence.



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- **Pest and Disease Management:** Regularly monitor fields for pests and diseases; ensure early detection and timely control in accordance with guidelines from local Plant Protection authorities.
- **Harvesting:** Harvest at optimal maturity and sun-dry the grains gently without spreading them too thinly to preserve the premium quality of the variety.

*** Important Notes**

- The sowing and transplanting schedule should follow the recommended cropping calendar of each locality.
- Strictly avoid split or prolonged nitrogen top-dressings. If alternative compound NPK fertilizers are used, apply according to the manufacturer's instructions on the packaging.
- Harvested grains must not be retained as seeds for the subsequent crop.