PRACTICES	HYBRID WATERMELON (SEAMONS RAJINI)	[illegible]	[illegible] ([illegible])	[illegible]	[illegible]	[illegible] ([illegible])	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] ([illegible])	[illegible]	[illegible] ([illegible])
Field Sanitation	Remove residues of previous crops, weeds, old vines and diseased/damaged plant material before sowing. Keep the boundaries of field clean to reduce pest and disease carry-over.	விதை மூலம்	முந்தைய பருவத்தின் எச்சங்கள், களைகள், பழைய கொடிகள் மற்றும் நோய் தாக்கிய தாவர பொருட்களை விதைப்பதற்கு முன் அகற்றவும். பூச்சிகள் மற்றும் நோய்களின் பரவலைக் குறைக்க வயலின் எல்லைகளை சுத்தமாக வைத்திருக்கவும்.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Soil requirement	Sandy loam to loam soils, well-drained, fertile, rich in organic matter. Ideal pH: 6.0–7.0. Avoid waterlogging as watermelon roots are shallow and sensitive to excess moisture.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Soil Testing	Conduct soil testing at least once every 2–3 years for EC, pH, OC, and macro-micro nutrients, and apply fertilizers based on test results.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Climate Suitability	Watermelon is a warm-season crop. Optimum temperature: 25–35 °C. Avoid frost and high humidity. Dry, hot weather improves fruit sweetness.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Land preparation	Deep ploughing 2–3 times followed by harrowing for fine tilth. Incorporate 8–10 tons FYM or compost per acre. Create ridges/raised beds for better drainage, especially in heavier soils.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sowing Time	Spring-Summer Crop: Nov-Feb. Off-season: Sept-Oct	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Seed rate & Spacing	Seed rate: 350–400 grams/acre (open-field). Seeding: In ridges or raised beds, 1.5–2 cm deep. Pre-irrigate soil for better germination. Spacing: 2 m × 0.5-0.75 m	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Seed Treatment	Treat seeds with Carbendazim @ 2 gm/kg seed, can be followed by Trichoderma viride @ 4 gm/kg seed before sowing.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Weed Management	Maintain weed-free field during first 3–6 weeks. Use shallow hoeing, mechanical operations, or mulching. Two to three weedings may be required.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fertilizer Management	FYM or Compost: 8-10 tons before sowing. Chemical fertilizers: Urea ~110 kg, SSP ~155 kg, MOP ~40 kg. Apply full P & K + 1/3 N at sowing; remaining N along vine growth and at fruit set. Foliar spray: 19:19:19 + micronutrients @ 2–3 g/L at 30–35 DAS; 0:0:50 + Hexaconazole @ 25 ml/10 L at 55 DAS.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Irrigation Management	Uniform irrigation, avoid water stress and waterlogging. In summer: once a week or more in sandy soils. Reduce/stop irrigation 3–6 days before harvest to improve sweetness.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pest Management	Aphids & Thrips: Thamethoxam @ 5 gm/10 L water. Leaf Miner: Abamectin @ 6 ml/10 L. Fruit Fly: Remove infested fruits. Neem seed kernel extract 10 gm/L water, repeat Malathion + Jaggery solution 5-7 times at 10 day intervals.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Disease Management	Powdery Mildew: Water-soluble Sulphur 20 gm/10 L, 2-3 sprays at 10-day intervals. Downy Mildew: Mancozeb 64% WP @ 2 g/L. Sudden Wilt: Avoid waterlogging, Trichoderma viride 1 kg + 50 kg FYM, spray systemic + contact fungicide when needed.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Harvesting & Yield	Half-slip stage (local market) or mature-green stage (long transport). Watermelon gives average 25-35 ton fruit per acre.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Post-Harvest Management & Storage	Store the fruits in cool place after harvest. Grade by size and quality. Store and transport the fruits under recommended temperature.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Disclaimer	These recommendations are based on SAU, government agencies, and trial content. Actual results may vary depending on soil type, climate, variety, and crop management practices.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]