Purdue Methods: Rice (japonica)

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From: http://www.hort.purdue.edu/hort/facilities/greenhouse/RiceMethod.shtml

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	Standard Production	Large Scale	Root Treatment Production
Risk	Low	Moderate. Small pots, less time to correct irrigation failure	Low
Photoperiod	Short day (12 hour) not required, but will hasten flowering	Short day (12 hour) not required, but will hasten flowering	Short day (12 hour) not required, but will hasten flowering
Light intensity	250 µmol/m^2/s minimum. 500 – 1000 µmol/m^2/s for robust growth recommended. Will require supplemental HID fixtures in winter for northern latitudes of US.	250 µmol/m^2/s minimum. 500 – 1000 µmol/m^2/s for robust growth recommended. Will require supplemental HID fixtures in winter for northern latitudes of US.	250 µmol/m^2/s minimum. 500 – 1000 µmol/m^2/s for robust growth recommended. Will require supplemental HID fixtures in winter for northern latitudes of US.
Temperature	26-28C light 20-22C dark	26-28C light 20-22C dark	26-28C light 20-22C dark
Container	9-cm (4") square pot	7-cm (3") square pot	9-cm (4") square pot
Root Medium	'Profile Greens' calcined clay granules or 1:1 ratio by volume of ProMix BX and Profile Greens	'Profile Greens' calcined clay granules or 1:1 ratio by volume of ProMix BX and Profile Greens	'Profile Greens' calcined clay granules
Plant Spacing	5-6 plants per tray (tray is 10-cm x 50-cm)	8-11 plants per tray (tray is 10-cm x 50-cm)	5-6 plants per tray (tray is 10-cm x 50-cm)
Watering system	Constant sub-irrigation using trays with 1-3 cm of clear water. Timed drip-irrigation system recommended to keep trays filled.	Constant sub-irrigation using trays with 1-3 cm of clear water. Timed drip-irrigation system REQUIRED to keep trays filled.	Constant sub-irrigation using trays with 1-3 cm of clear water. Timed drip-irrigation system recommended to keep trays filled.
Fertilizer type	General purpose liquid fertilizer w/ micronutrients	General purpose liquid fertilizer w/ micronutrients	General purpose liquid fertilizer w/ micronutrients
Fertilizer strength	200 ppm N (200 mg N/liter)	200 ppm N (200 mg N/liter)	200 ppm N (200 mg N/liter)
Fertilizer frequency	Twice per week, applied to pot reservoir, not trays. Fertilizer solution can be used constantly in sub-irrigation trays for first 30 days of production	Twice per week, applied to pot reservoir, not trays	Twice per week, applied to pot reservoir, not trays. Fertilizer solution can be used constantly in sub-irrigation trays for first 30 days of production
Algae control	Drain trays twice per week. Replace trays and rinse off pots exterior if algae develops	Drain trays twice per week. Replace trays and rinse off pots exterior if algae develops	Drain trays twice per week. Replace trays and rinse off pots exterior if algae develops
Two-spotted spider mite control	Remove infested leaves and forcefully hose off plants routinely. Predatory mite releases with compatible pesticide applications.	Remove infested leaves and forcefully hose off plants routinely. Predatory mite releases with compatible pesticide applications.	Remove infested leaves and forcefully hose off plants routinely. Predatory mite releases with compatible pesticide applications.