





		ECOLOGY	PHOTOS	CONTROL
Rice blast				<ul style="list-style-type: none"> <li>❖ Resistant /Tolerant Varieties : BW 196 , IR 2793-80-1, NERICA 1, 4, 10 &amp; 11</li> <li>❖ Use of certified seeds</li> <li>❖ Application of recommended rates of Nitrogen</li> <li>❖ Application of Silica (Calcium Silicate)</li> <li>❖ Water Management</li> <li>❖ Early sowing</li> <li>❖ Field Sanitation- Removal of infected straws</li> <li>❖ Chemical control – Two applications of fungicide at 35 DAT and 70 DAT at recommended rates</li> <li>❖ Chemicals - Carbendazim (Rodazim, Goldazim , Bavistin), Probenazole, Tricyclazone, Benomyl, Topsin</li> </ul>
Leaf Blast	<ul style="list-style-type: none"> <li>❖ Spindle-shaped lesions with grey centres surrounded by brown margin</li> </ul>	All ecologies		
Neck Blast	<ul style="list-style-type: none"> <li>❖ Neck rot seen as a blackish coated area at the base of the panicle</li> </ul>			
Collar Blast	<ul style="list-style-type: none"> <li>❖ Infection at the junction of the leaf blade and sheath results in the typical brown "collar rot" symptom.</li> </ul>			
Panicle Blast	<ul style="list-style-type: none"> <li>❖ Grain sterility normally observed as “white heads”</li> </ul>			
Rice Yellow Mottle Virus (RYMV)	<ul style="list-style-type: none"> <li>❖ Small, yellow-green streaks on the leaves Yellow or orange discoloration of the older leaves also occurs.</li> <li>❖ Yellow patches across the field</li> </ul>	<ul style="list-style-type: none"> <li>❖</li> </ul>		

	<ul style="list-style-type: none"> <li>❖ Crinkling, mottling, malformation of leaves incomplete emergence of the panicles</li> <li>❖ Sterile grains</li> </ul>			<ul style="list-style-type: none"> <li>❖ Removal and destruction of infected plants</li> <li>❖ Direct Sowing</li> </ul>
Sheath Blight	<ul style="list-style-type: none"> <li>❖ Oval greenish-gray lesion developed near the waterline in lowland fields</li> <li>❖ Lesions have irregular outline and grayish-white center with dark brown borders</li> <li>❖ Fungal mass formed in the lesion that are white when young and turn brown to dark brown when older.</li> </ul>			<p><b>Cultural Practices</b></p> <ul style="list-style-type: none"> <li>❖ Application of recommended Nitrogen rates</li> <li>❖ Field Sanitation- Removal of weeds</li> <li>❖ Reduced seeding rate and proper spacing</li> </ul> <p><b>Chemical control</b></p> <p>Foliar Fungicides-Benomyl, Topsin, Thiophanate, Methyl, Edifenphos, Azoxystrobin</p>
Brown Spot	<ul style="list-style-type: none"> <li>❖ Small, circular, brown lesions, which may combine and cause distortion of the primary and secondary leaves</li> <li>❖ Black discoloration of the roots</li> <li>❖ Stunting and death of infected seedlings tiny,</li> </ul>	❖	❖	<ul style="list-style-type: none"> <li>❖ Resistant Varieties</li> <li>❖ Application of recommended fertilizers and rates</li> <li>❖ Seed treatment with water at 53-54°C for 10-12 min</li> </ul>

	<p>Dark brown to black oval spots seen as black discoloration</p>			❖ Foliar fungicides
Bacterial Blight	<ul style="list-style-type: none"> <li>❖ Small, green water-soaked lesion develop at the tips and margins leaves</li> <li>❖ The spots merge and become chlorotic then necrotic forming opaque white to grey colored lesions that extend from leaf tip down along the leaf veins and margins.</li> <li>❖ Symptoms are usually observed at the tillering stage and disease incidence is highest at the flowering stage</li> </ul>	❖	❖	<ul style="list-style-type: none"> <li>❖ Field Sanitation- Removal of weeds, rice straw &amp; volunteer seedlings</li> <li>❖ Water management (Drainage)</li> <li>❖ Application of recommended fertilizers and rates</li> <li>❖ Fallowing</li> <li>❖ Seed treatment with bleaching powder and zinc sulphate</li> <li>❖ Use of Certified seeds</li> </ul>
Bacterial Leaf Streak	<ul style="list-style-type: none"> <li>❖ Narrow, dark-greenish, water-soaked, interveinal streaks of various lengths on the leaf blades.</li> <li>❖ Browning and drying of leaves</li> <li>❖ Amber colored</li> </ul>	❖	❖	<ul style="list-style-type: none"> <li>❖ Application of recommended fertilizer and rates</li> <li>❖ Appropriate plant spacing</li> <li>❖ Resistant varieties</li> </ul>

				<ul style="list-style-type: none"> <li>❖ Hot water treatment of seeds</li> <li>❖ Water Management (Drainage)</li> </ul>
Stem rot	<ul style="list-style-type: none"> <li>❖ First symptoms observed in the field after the mid- tillering stage</li> <li>❖ Small, blackish, irregular lesion on the outer leaf sheath near the water line.</li> <li>❖ Lesion enlarges as the disease progresses</li> <li>❖ Infection of the culm result in lodging, unfilled panicles, chalky grains and in severe cases, death of the tiller.</li> <li>❖ Brownish-black lesions appear and finally one or two internodes of stem rot and collapse.</li> <li>❖ Cross section of infected stem shows dark grayish fungal mass on hollow section</li> </ul>	❖	❖	<ul style="list-style-type: none"> <li>❖ Crop residue management to minimize inoculum</li> <li>❖ Proper fertilizer application (amendment with sodium silicate)</li> <li>❖ Fallowing</li> <li>❖ Resistance varieties</li> <li>❖ Fungicide application- Validamycin , Carbendazim</li> </ul>
Sheath rot	<ul style="list-style-type: none"> <li>❖ Lesions with gray to light brown centers surrounded by distinct dark reddish brown margins are seen on</li> </ul>	❖	❖	<ul style="list-style-type: none"> <li>❖ Resistant varieties</li> <li>❖ Insect control - Stem borers</li> </ul>

panicles.

- ❖ Lesions enlarge covering the entire leaf sheath. Lesions are seen as diffuse reddish brown discolorations in the sheath
- ❖ Rotting of the leaf sheath that encloses the young panicles.
- ❖ An abundant whitish powdery growth may be found inside the affected sheaths
- ❖ Under severe conditions, the panicle may fail to emerge completely or fail to emerge
- ❖ Panicles that have not emerged rot and florets turn red-brown to dark brown.
- ❖ Grains are sterile, shriveled, partially or unfilled, and



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Sheath rot