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We are currently observing widespread neck blast of rice in Arkansas for the third year in a row, largely on the rice varieties CL 151, CL 261, Francis, Jupiter and at lower levels on Wells and CL 142. The blast problem was likely increased by frequent May rains that resulted in a lot of leaf blast in the state, followed by erratic drought patterns that made keeping a deep, consistent flood on rice fields difficult.

Recently, we also began noticing symptoms of bacterial panicle blight developing in fields of CL 261 and CL 181, and at low levels in CL 151, CL 142, CL 111 and Francis. Weather patterns in recent weeks have included very warm nights with high humidity, conditions that favor this disease. We are hopeful that bacterial panicle blight will stay at low levels, but early observations concern us that this may be a panicle blight year like we saw in 1995, 1998, and 2001 on Bengal and a few other varieties.

Distinguishing between bacterial panicle blight and early neck blast symptoms is not difficult, with some practice. The following photos illustrate the diagnostic differences.



Bacterial Panicle Blight (left photos): Note the cluster pattern of early infected heads (A), with a mixture of tan, green, brownish or gray kernels – but a green rachis (panicle branches)(B). At least some kernels will have a distinctly brown base (C) and inside the small kernel will be aborted and rotted at the base.

Neck blast of rice (right photos): Note the “white heads” in affected field (D) and the dark lesion on the node below the infected panicle (E); dark lesions may also appear in the rachis, resulting in blighted spikelets or kernels; earlier lesions of blast can be found on leaves, collars and lower stem nodes (F); spores can be easily observed at 100X if a microscope is available (G).