

Field Notes
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Last week was the first really hectic week in terms of problem calls we have faced this year. Some of the information in this issue concerns those problems. Most of you who responded to the “guess” question answered correctly. It was a lightning strike from the day before. Interestingly, the point of the strike was at one end of the elliptic area in the first photograph.



The photograph to the left above illustrates why chinch bugs are often both difficult to detect and to control. During the day they frequently hide in cracks in the soil surface to escape their predators moving rapidly from crack to crack feeding on the roots or tender shoots at or very near the soil line. Sometimes their feeding signs betray their presence. Dehydrated leaves, shriveled seedlings mixed in with healthy plants are all that can be found in some fields. We have found after sitting still for a few minutes they will begin to emerge and move around after having taken shelter when they sensed our movement. The same shelter provided by the cracks makes it difficult to control these insects with insecticides. Following flushing or rainfall if they are still a problem treatment with an insecticide is usually more effective because the cracks have been closed exposing them to the treatment.

The photograph above and to the right is what we believe is an armyworm on seedling rice. These caterpillars were moving from adjacent levees where the grasses were dried out. When feeding is heavy enough that stand reduction is taking place it is difficult and would be ill advised to ignore the problem. When the field cannot be sprayed for some reason flooding the plants over night to the point of completely covering them will often kill enough of the armyworms to prevent any substantial damage.



Since early last week we have started getting quite a few calls regarding fields with Localized Decline, the now official term for what we used to call “Mystery Malady”. Everything fits what we know of the disorder. It begins to show up just prior to or at internode elongation (green ring). Some of us suspect the stress of changing from vegetative to reproductive growth is part of the triggering mechanism for the appearance of symptoms though the problem is much more complex. Dr. Gary Beritenbeck and his research associate Joe Kraska have done an outstanding job trying to quantify any and all nutrients involved in the disorder. Reduced iron is apparently one of the culprits. In the photograph above the typical irregular discolored areas of the field are obvious. In the following photograph on the left are orange colored roots. The orange color is iron plaque forming on the roots. The last photograph shows the bronzed colored leaves of stricken plants.



The seedling in the photograph at the left is of a red rice seedling dug up in one of our verification fields last week. The chlorotic area (white part of the stem) is about 2½ inches long. That is the approximate depth from which this seedling emerged. If we recommended planting commercial varieties 2½ inches deep we would get bombarded by frustrated growers who had uneven or no stands at all. Mother Nature always finds a way. The most extreme case I encountered was red rice I dug up from 4 inches deep. If you look closely about 1 inch above the seed you will see a few small roots. This is the beginning of the root system of the plant. In corn the distance from the soil surface to this point is controlled genetically while the distance from these roots to the seed is environmentally influenced. I don't know if this is true in rice.