Red at night, sailors delight
Red in the morning, sailors take warning
Plant corn when the oak leaf is as big as a squirrel’s ear
Your Nutrient Management Questions
Seed Attacking Insects

In the past, used planter insecticides in high risk situations—corn following pasture, manured fields.

Today, seed treatments are highly effective.

Seedcorn Maggots
Larvae of a fly

Wireworms
Larvae of Click Beetles

White Grubs
Larvae of May & June bugs
Some Seed Treatments Linked to Bee Decline

Bees and insecticides
Subtle poison
Evidence is growing that commonly used pesticides, even when employed carefully, are bad for bees

Mar 31st 2012 | from the print edition
IN THE winter of 2006 beekeepers in America noticed something odd—lots of their hives were dying for no obvious reason. As the months passed, reports of similar phenomena began coming in from their European counterparts. Mystified scientists coined the label “colony collapse disorder” (CCD) to describe what was happening. Since then, much brow-sweat has been expended trying to work out just what CCD really is.

Dying bees are a problem, and not just for apiarists. Bees pollinate many of the world's crops—a service estimated to be worth $15 billion a year in America alone. And there is no shortage of theories to explain the insects' decline. Climate change, habitat destruction, a paralysing virus, fungal infection and even a plague of parasitic mites have all been proposed. But one of the leading ideas is that the bees are suffering from the effects of neonicotinoids, a class of commonly used pesticides, introduced in the 1990s, which are toxic to insects but much less so to mammals.

Two papers published this week in Science lend weight to this idea. The first, from a group led by Penelope Whitehorn and David Goulson of the University of Stirling, in Britain, examined the effects these insecticides have on bumblebees, which are closely related to honeybees. Bumblebees are less studied than their honeybee cousins, but they also pollinate many commonly eaten crops, including strawberries, raspberries and runner beans.
Early-Season Pests
Usually managed by rescue treatments as needed

Cutworms

Common Stalk Borer
European Corn Borer

• Devastating in the past—used whorl treatments with granular insecticides
• Most damage caused by larvae tunneling into stalks
• Now largely managed by Bt GMO hybrids
Corn Rootworm

- Concern more when corn follows corn
- Devastating in past—used granular planter insecticides and adult treatment programs
- Most damage caused by larvae eating roots
- Today, largely managed by Bt GMO hybrids
Corn Weed Control

- Roundup predominates used with herbicide resistant hybrids
- Using more than one weed control method helps lessen the chances of resistant weeds
Corn Diseases: Damping Off

Corn seedlings protected from early-season diseases from fungicide seed treatments
Gray Leaf Spot

- Lesions restricted by veins
- Hybrids vary in resistance
- More concern when corn follows corn

http://bulletin.ipm.illinois.edu/article.php?id=151
Northern Corn Leaf Blight

• Large cigar-shaped lesions
• Damage caused by plant’s reduced capability for photosynthesis
• Resistant hybrids, crop rotation helps manage

http://www.ent.iastate.edu/imagegal/plantpath/corn/northleafblight/ncorn_leaf_blight_0796_02.html
Crazy Top

- More of a curiosity than a real concern for farmers
- Occurs after fields are flooded
Corn Smut

- Usually more of a curiosity than a real concern
- A delicacy in Mexico!
Uncommon in the past to apply fungicides for corn foliar diseases; common today due to high grain prices
Fusarium and Gibberella Concern in Wet Years
Aspergillus in Dry Years Like 2012
These molds can contaminate grain with toxins

Pink color is characteristic of Fusarium

http://www3.ag.purdue.edu/extension/cornmold/Pages/default.aspx
# Hybrid Characteristics From a Seed Catalog

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Look at Seed Catalog Ratings to Help Guide Decisions Regarding Genetic Resistance

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Troubleshooting

• Take a stand count
• Go through everything the farmer did with that field looking for clues
• Dig up plants to examine roots
• Look for patterns in field
• Try to replace emotions and unknowns of situation with facts
Illinois Corn Field Pattern