

Darkling/Mealworm Beetles In Hay Or Feed

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June 19, 2012 – Finding beetles in stored alfalfa hay or animal feed raises an immediate red flag. Are they blister beetles? If not, what are they and are they harmful? Usually, it is darkling beetles, they larvae are called mealworms. These insects tend to hide so they can be found under, in, or between stacked hay bales. Darkling beetles do not contain cantharidin, the toxin in blister beetles, they are not harmful.

Darkling beetles are different from blister beetles. The most obvious feature is the distinctly narrow "neck" of a blister beetle which lies between the head and thorax of the insect. In contrast, the "neck" area of the darkling beetle is wider than its head. Also, they have hard front wings compared to the soft, more flexible front wings of blister beetles.

Mealworms, the larval stage of the darkling beetle, are common in stored or spilled grain or feed, where they eat broken kernels and fines.

Adults often wander some distance from their breeding site and enter stacked hay so it can be hard to find the source of the infestation.

Sanitation is the key to dealing with darkling beetles but it can be difficult to find and eliminate all breeding sites of these insects. Fortunately, their development is relatively slow so it takes time for large numbers to develop. Brooms and shop vacs need to be used to clean all accessible fines.

Infestations in stored bulk feed are more difficult to address, depending on the amount that is present, how quickly it will be used, and time of year. It may be best to feed out the supply and thoroughly clean the storage area and surroundings before re-filling it. A pyrethrin spray labeled for use in feed storage areas after clean up will help to eliminate surviving insects. Information on blister beetles in alfalfa is available in this factsheet - www.ca.uky.edu/entomology/entfacts/ef102.asp.

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Figure 17. Darkling/Mealworm beetle.



Figure 18. Blister beetle (left) with distinct "neck", the darkling beetle (right) does not have a narrow neck.



Figure 19. Mealworm -darkling beetle larva.