

HARVEST ALERT

FACT SHEET # 9

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Soybean Crop Development

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Soybean development throughout Michigan is progressing slow due to delayed planting, wet field conditions and cool temperatures. This late development is causing many growers to be concerned about an early or even normal killing frost. Studies in Wisconsin have shown that soybean yields will not be hurt if the first killing frost occurs during the R7 stage of growth. The R7 stage can be identified as the beginning of maturity where one or more pods have reached the mature color (normally tan or brown).

If a killing frost occurs when pods are still green (R6), yields and seed quality will most likely be adversely affected. Terminating growth during the R7 stage where pods are yellow may or may not reduce yields. Oil and protein content are not usually affected by a killing frost during the R7 stage. Seed germination and vigor may be seriously damaged if plants are killed by frost any time before the R8 stage (95 percent of the pods have reached mature color).

In the event of a killing frost during the R6-R7 stage, growers should wait until pods reach the mature color before harvesting for grain. The seeds will mature after frost and will still yield grain but growers need to give the soybeans time to mature and dry down before harvesting. Soybeans killed or damaged by frost may possibly be used for forage, however, most herbicide labels restrict their use for forage or feed. Growers who plan to use soybean forage or feed for livestock should read the label for information on the required number of days after herbicide application before feeding to livestock.

