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## Abstracts

MOORMAN, G.W. 1988. **Predicting when plant phenophases will occur.** Ground Up 34(2): 16-17.

Many phenological studies have attempted to relate the stages of plant development to weather data such as temperature and precipitation. Their object was to predict when a plant would reach a certain stage of development under the ambient weather conditions. Such information would be very useful in cases where a particular pest management procedure must be performed at a particular plant growth stage. The phenophases of common woody and herbaceous plants have been used as cues for planting and harvesting crops to assist in avoiding insects and diseases. It has also been suggested that they be used in timing the application of fungicides to protect plants against diseases. Mathematical models using environmental data have been developed to describe plant phenology. One factor that hampers the development of any model for predicting plant phenophases is the need for several years observations on uniform plant material. If the models are accurate, nurserymen and landscapers could use relatively simple, inexpensive methods based on readily available information to assist in timing pesticide applications.

KUHNS, L.J. 1988. **Herbicides for landscape plantings.** Ground Up 34(2): 30-34.

A wide variety of herbicides is available for use in landscape planting. Properly selected and applied they can provide safe and effective weed control at a reasonable cost. Improper selection or application can result in poor weed control, or worse, injury or death of the landscape plants. Selective herbicides kill or injure some plants but cause little or no damage to others; nonselective herbicides kill or injure almost all plants. Preemergence herbicides control weeds at the seed germination stage and must be applied before weeds emerge through the soil surface. In most cases, rainfall or irrigation is needed to activate the herbicides and move them into the soil where the weed seeds are germinating. Postemergence herbicides are used to kill existing weeds—weeds that have "emerged" above the soil surface. They may have contact activity or may be translocated. Contact herbicides kill only that part of the plant with which they come in contact.