

## CRICKET DAMAGE TO RED CEDAR SEEDLINGS

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In July 1979, nursery personnel at Claridge Nursery, located near Goldsboro, N.C., began to notice mortality in 1-0 eastern red cedar, *Juniperus virginiana* seedlings. A careful examination of the seedlings revealed that the seedlings were debarked and girdled from groundline to a height of approximately 1 inch (fig. 1). Samples 2 square feet in size taken at 50 foot intervals indicated that approximately 7 percent of the 154,000 red cedar seedlings were girdled. The only insect found in the beds was the common field cricket (*Gryllus assimilis*). Although field crickets have been reported damaging a number of crops, we could find no report of damage to tree seedlings.<sup>1</sup>

In order to confirm that the damage was caused by the cricket, we constructed three cages. Approximately 20 healthy red cedar seedlings were placed in each cage, along with a supply of water.

Ten crickets collected from the red cedar nursery beds were introduced into each of two of the cages. The third cage was used as a control and no crickets were introduced into it.

After one week, seedlings in cages containing crickets had been girdled (fig. 1), while no damage was evident in the cage which had no crickets. We feel that this confirms that the causative agent for the damage is the field cricket.

After this was confirmed, an insecticidal treatment eliminated the crickets and there has been no further damage to date.



**Figure 1.**—1-0 eastern red cedar seedlings girdled by common field cricket in Wayne County, N.C., in 1979.

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<sup>1</sup>Metcalf, C. L.; W. P. Flint and R. L. Metcalf. 1951. Destructive and Useful Insects. p. 528.