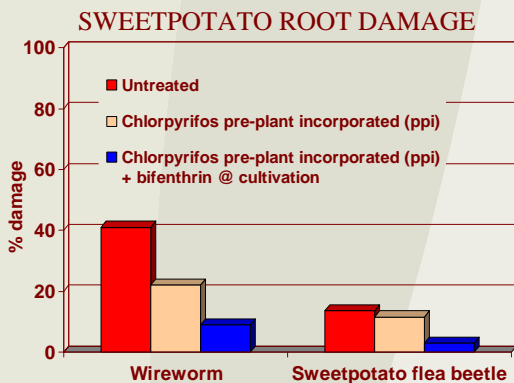


Pre-plant insecticides are important for killing over-wintering soil insects, but most wireworm eggs are laid in July...after pre-plant insecticide applications have lost their effectiveness. Soil insecticide incorporated at cultivation extends protection during peak wireworm egg hatch, when it is needed most.

Bifenthrin applied at cultivation reduces insect damage to roots.

- Applying soil insecticide at cultivation maximizes insect control.
- Bifenthrin can remain effective in the soil for up to four weeks.
- Bifenthrin at cultivation is an *effective* alternative to costly foliar sprays.
- NC State trials show bifenthrin incorporated at cultivation significantly reduces wireworm and sweetpotato flea beetle damage.



For more information on sweetpotato pest management or the use of bifenthrin on sweetpotato, contact your local North Carolina Cooperative Extension Service Center.

Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact your county Cooperative Extension agent.

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Prepared by
Mark R. Abney & George G. Kennedy
NC State University
Department of Entomology
Campus Box 7630
Raleigh, NC 27695-7630 USA

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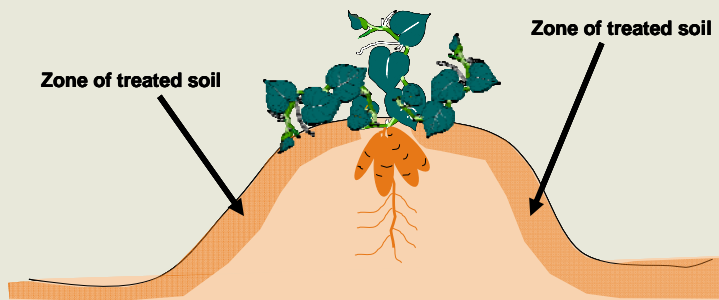
INCORPORATING INSECTICIDE AT CULTIVATION REDUCES INSECT DAMAGE IN SWEETPOTATO



Incorporating soil insecticide at cultivation improves wireworm control in sweetpotato.

How does it work?

- Bifenthrin incorporated at cultivation creates a zone of treated soil at the top of the bed where wireworms lay eggs.
- The treated zone acts as a barrier, killing newly hatched wireworms before they reach the roots.
- This approach is most effective when used in conjunction with a broadcast pre-plant incorporated (PPI) application of an effective soil insecticide.



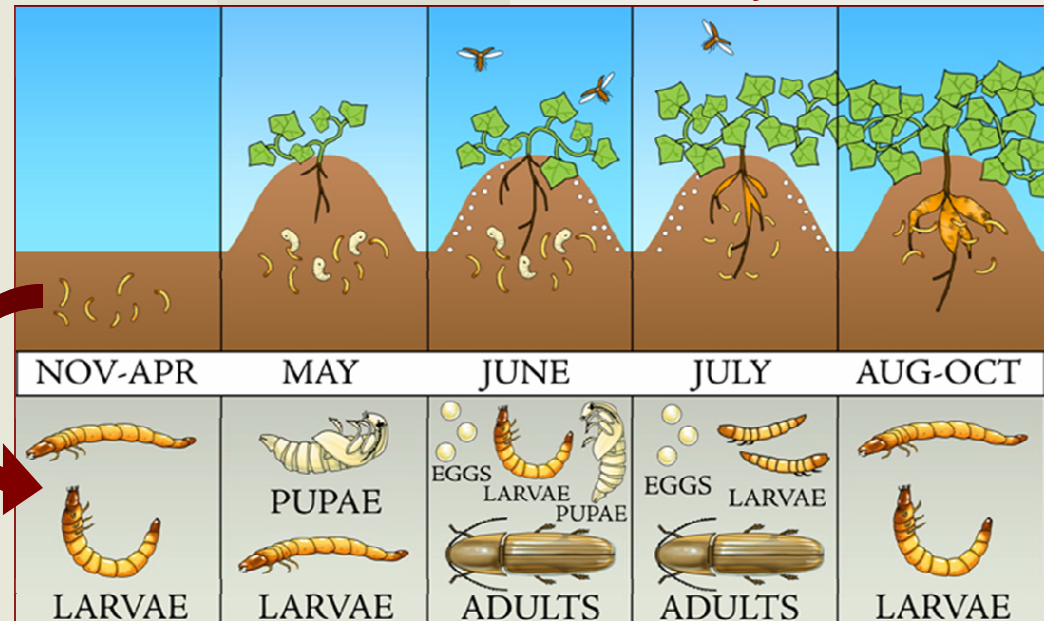
Straightforward application

- Applications are made at regular cultivation. No extra trips across the field are needed.
- Bifenthrin is applied as a spray directly to the soil in front of rolling cultivators.
- Rolling cultivators incorporate the insecticide in the upper layer of soil in the bed and furrow.
- Good soil coverage and incorporation are required to achieve best results.

Proper timing is important

- Wireworm eggs are laid from late June through July.
- Most wireworm eggs hatch in July.
- Bifenthrin should be incorporated at cultivation in late June or early July to maximize control of newly hatched wireworms.
- Only products specifically labeled for post-plant soil application in sweetpotato should be used.

Tobacco wireworm lifecycle



Each bottom panel shows a close-up view of the wireworm life stages depicted in the panel directly above it.