Insect pressure is one of the major challenges of vegetable production in the Deep South, where the weather is warm and humid. Repeated applications of pesticides are expensive and time consuming for the farmer, unappealing to many consumers and potentially harmful to the environment. Yet pest damage significantly lowers the value of fresh market produce, presenting growers with a difficult problem to solve.

Seeking a good alternative to repeated pesticide applications, Fairhope, Ala., farmer Will Mastin used a SARE grant to experiment with physical pest exclusion inside an existing high tunnel. Working with an Alabama Extension entomologist, Mastin outfitted a high tunnel with a woven mesh fabric and compared tomato production inside the tunnel to the open field. In one season, the result was impressive: In the tunnel, only 10-20 percent of tomatoes were lost to pests, whereas in the field losses were 80-100 percent.

Pest exclusion with shade cloth holds promise for Alabama growers as Mastin has identified areas to continue exploring. Air temperature is one issue, because it gets hot inside the tunnel when airflow is diminished. Another is the most effective way of including beneficial insects, since they cannot get into the tunnel on their own.

For more information on this project, see [www.sare.org/projects](http://www.sare.org/projects), and search for project number FS13-275.
SARE Grants in Alabama

SARE has awarded a total of 77 grants in Alabama since 1988.

8 On-Farm Research Grants
8 Graduate Student Grants
10 Professional Development Grants
12 Community Innovation Grants
20 Research & Education Grants
19 Farmer/Rancher Grants

SARE’s Impact

53 percent of producers report using a new production technique after reading a SARE publication.

79 percent of producers said they improved soil quality through their SARE project.

64 percent of producers said their SARE project helped them achieve higher sales.

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For detailed information on SARE projects, go to www.SARE.org

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