

# Project Summary for Iowa Soybean Research Center

## Mechanisms of defense suppression by cyst nematode effectors

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Cyst nematodes such as SCN are sedentary parasites that feed at single feeding sites inside the root throughout their life. It is, therefore, critical for cyst nematodes to avoid or inactivate strong plant defense responses. The Baum laboratory at ISU has discovered a small group of molecules called effectors in cyst nematodes that suppress or inactivate plant immunity. It is not yet known how these effectors accomplish this task. The Baum lab has the know-how to explore the mechanisms of this phenomenon. Understanding how cyst nematodes interfere with plant defense mechanisms can pinpoint strategies to strengthen natural plant defense mechanisms.

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