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**Natural insecticide recreated in the lab**

CAMBRIDGE, England, Aug. 28 (UPI) -- British scientists have developed the first synthesis of azadirachtin -- a natural compound that acts as an insecticide.

Azadirachtin was first isolated from the neem tree (also known as the Indian lilac) in 1968 and found to be a highly active substance that inhibits the development of the larvae of a broad spectrum of destructive insects but is harmless to mammals and beneficial insects, such as bees and ladybugs.

Although the structure of the complicated molecule was published in 1985, attempts to make the compound proved unsuccessful.

But University of Cambridge Professor Steven Ley and his team, which studied the problem for 22 years, successfully synthesized the compound using a Claisen rearrangement and a novel radical cyclization reaction.

Ley said his technique might lead to a new generation of environmentally acceptable insecticides.

The research is detailed in the journal *Angewandte Chemie*.

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