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A NOVEL TRAP FOR STORED PRODUCT MOTHS BASED ON ELECTROMAGNETIC
AMPLIFICATION OF THE SEX PHEROMONE

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A newly designed moth trap for stored product use has been developed by Dykstra Laboratories, Inc. in Gainesville, Florida, USA. The trap uses standard pheromone lures but amplifies the electromagnetic emissions emanating from the pheromone molecule by placing the lure inside a resonant cavity. This molecular amplification has been shown to be more attractive to the Indianmeal moth in laboratory tests by capturing approximately four times the number of moths over conventional sticky traps. Although the trap needs regular cleaning, it is reusable and will function efficiently for over a year without changing the pheromone lure. The major concepts behind the success of the trap assume the validity of the electromagnetic theory of olfaction in insects as put forward by Robert H. Wright and Philip S. Callahan.