

Session	Start-ups/SMEs looking for Finance: pre-seed/angel/seed funding
Title	New kind of pheromones to control agricultural pests in the soil
Company	Pheronym
Speaker	Dr. Fatma Kaplan
Keywords feedstock	
(max. 2)	
Keywords technology	Nematode pheromones
(max 2)	
Keywords	Nemastim, Pherocoat
End-Product (max 2)	
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Abstract:

Farmers have the challenging task of growing food and fiber to feed the growing world population. Without pest control, farmers would lose 30-80% of their crops. Despite the use of synthetic pesticides, farmers are still losing \$300 billion in crops annually to pests and diseases. Furthermore, agriculture releases 17 gigatons of CO2 equivalent, 31% of the total emissions annually. Ninety-nine percent of synthetic pesticides are derived from fossil fuels, so traditional pesticides alone are not the solution. To make matters worse, 50% of their topsoil is degraded. Farmers need effective solutions that nurture the topsoil with less carbon footprint to grow more food and fiber.

We use a new kind of pheromone from microscopic roundworms called nematodes to address farmers' needs. We use bio-manufacturing for pheromone production. First, our feedstocks are plant-based. Second, our pheromones are effective at very low concentrations. Our application rates are measured in micrograms of active ingredient per hectare. Third, our product nurtures the topsoil by improving soil biodiversity. Finally, our first product makes biocontrol organisms, beneficial nematodes, more effective at killing insect pests in the soil. Pheronym's products are replacing traditional synthetic chemical pesticides. Our pheromones offer farmers a smart solution to reduce greenhouse gases and protect biodiversity—all without compromising food production.