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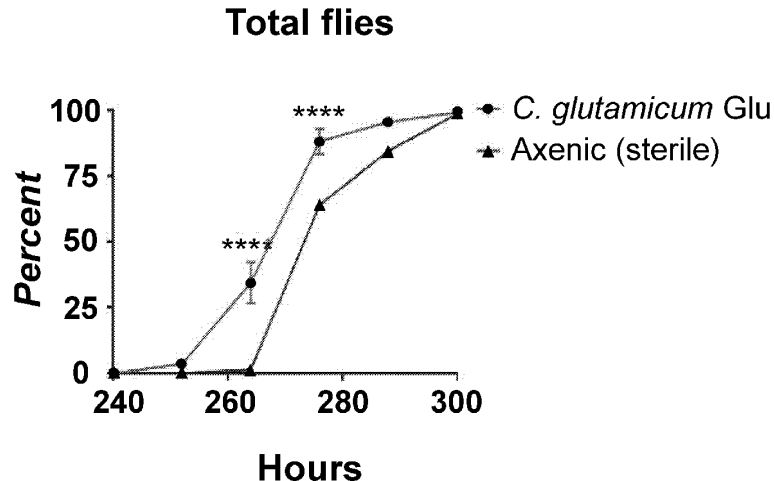
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(54) Title: COMPOSITIONS AND RELATED METHODS FOR AGRICULTURE

Fig. 1



(57) **Abstract:** Provided herein are agents, compositions, and methods for agricultural use, e.g., for altering the level, activity, or metabolism of one or more microorganisms resident in a host nematode or arthropod (e.g., honeybee or silkworm), the alteration resulting in an increase in the fitness of the host. The invention features a composition that includes an agent (e.g., phage, peptide, small molecule, antibiotic, or combinations thereof) that can alter the host's microbiota in a manner that is beneficial to the host. By promoting favorable microbial levels, microbial activity, microbial metabolism, and/or microbial diversity, the agents described herein may be used to increase the fitness of a variety of beneficial nematodes or arthropods, such as bees and silkworms, utilized in agriculture and commerce.

[Continued on next page]

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