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(54) Title: METHODS AND RELATED COMPOSITIONS FOR MANUFACTURING FOOD AND FEED

(57) Abstract: Provided herein are methods and compositions for food and feed applications, e.g., for targeting one or more microor-
ganisms resident in a host insect, the modulation resulting in an increase in the fitness of the host. The invention features a composition
that includes a modulating 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 modulating agent described herein may be used to increase the fitness of a variety of insects utilized
in human food or animal feed industries.

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