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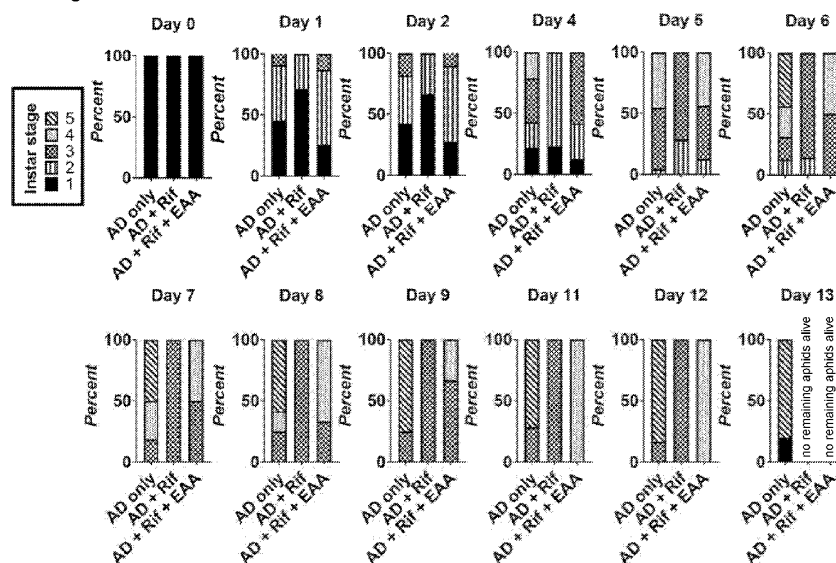
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(54) Title: COMPOSITIONS AND RELATED METHODS FOR CONTROLLING VECTOR-BORNE DISEASES

Fig. 2A



(57) Abstract: Provided herein are agents, compositions, and methods useful for animal health, e.g., for altering the level, activity, or metabolism of one or more microorganisms resident in a host insect (e.g., arthropod, e.g., insect, e.g., pathogen vector), the alteration resulting in a decrease 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 detrimental to the host. By disrupting microbial levels, microbial activity, microbial metabolism, or microbial diversity, the agents described herein may be used to decrease the fitness of a variety of insects that carry vector-borne pathogens that cause disease in animals.

[Continued on next page]

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