

Beet leafhopper (*Circulifer tenellus*; Hemiptera: Cicadellidae) probing behavior relative to *Wolbachia* infection

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Wolbachia-infected and uninfected subpopulations of beet leafhoppers (*Circulifer tenellus*) co-occur in the Columbia Basin region of Washington and Oregon. While facultative endosymbionts such as *Hamiltonella defensa* have demonstrably altered probing behavior in hemipteran hosts, the behavioral phenotypes conferred by *Wolbachia* to its insect hosts, including probing, are largely understudied. We studied the probing behavior of beet leafhoppers from in-house colonies with and without *Wolbachia* on potato plants (*Solanum tuberosum* cv. Umatilla Russet) using electropenetrography. Insects were recorded for four hours, and wavelengths annotated following established conventions for beet leafhoppers. As both colonies carried beet curly top virus (BCTV), and some *Wolbachia* strains can mediate insect-vectored pathogen transmission, plants were maintained for two weeks post-assay and tested for successful BCTV inoculation. Waveform incidence and duration as well as BCTV transmission success were compared between beet leafhoppers with and without *Wolbachia*.