

Using EPG to determine the duration of feeding associated with scarring damage in faba bean seed

Teresa Aguiar-Cordero

University of Saskatchewan, Canada

Lygus are pests that feed on numerous cultivated plants, including faba beans (*Vicia faba*), resulting in quality loss and economic impact. The Electrical Penetration Graph (EPG) is a technique used to monitor and quantify insect feeding behavior on plants. In this study, I aimed to determine the duration of feeding associated with scarring damage in faba bean seeds caused by *Lygus*. Faba bean plants at the R4-R5 plant stage were exposed to *Lygus lineolaris* at the adult stage while being monitored through EPG. EPG technique is effective in measuring the different feeding stages of *Lygus*, such as probing, salivating, and ingestion, which could be used to determine the duration of feeding associated with scarring damage. The insects were removed at different feeding stages, and the pods were evaluated for damage. EPG can be a valuable tool for monitoring and assessing the feeding behavior of insects on pulse crops, such as faba beans. This information can help farmers to identify critical periods of insect feeding and implement appropriate control measures to mitigate the economic impact of pests on crop yield and quality.