

**Feeding Behaviour Analysis of the Greenpeach Aphid,  
*Myzus persicae* on Several Plants by  
Electrical Penetration Graph (EPG)**

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To investigate feeding behaviour of the greenpeach aphid on several plants, DC electrical penetration graph technique was used. We chose 8 plants (pepper, radish, cabbage, eggplant, cucumber, carrot, melon, and watermelon) which were known by main host plants on this species. This study focused whether feeding patterns of the aphid was different and which plants was the most preferable among 8 host plants. All recordings were carried for 6 hours and it was used adult aphids which were collected in pepper plants. Four characterization of feeding patterns were analyzed: (1) the time from initial proboscis contact with a each leaf until the first electrical contact, as a measure of the time taken for the stylet penetration; (2) the time from electrical contact to the first potential drop, as a time consumed until intracellular sampling; (3) the number of potential drops per an hour during periods of regular intercellular pathway probing; (4) the time from electrical contact to the first phloem specific pattern, indicating the time taken to reach and attempt to feed upon the phloem; and (5) the total time consumed during the aphid fed upon phloem. As a result, there were significant differences on their feeding patterns among 8 plants, and especially, we convicted that many specific feeding patterns were showed and aphids preferred to feed on a certain plant leaf.