



EPG systems

WAGENINGEN, THE NETHERLANDS

Other Techniques/Products of Interest

Stylectomy

Stylet amputation is an interesting technique that is very useful to use in combination with EPG recording.

Histology

If stylets are cut during an EPG waveform the stylet tips will remain in the plant tissue related to the waveform and such combined approach has been used to correlate EPG waveforms with plant tissues. Further histological work can imply either light microscopy or transmission electron-microscopy. The latter giving much more detailed information than the first.

Phloem sap collection

When stylets are cut during phloem feeding (waveform E2) the phloem sap will come out of the stylet stump and can be collected in micro-capillaries for chemical analysis. This method is not easy (!), especially not in aphids on dicots. Monocots are easier as the sap will continue flowing much longer.

Zapper

This is a radio frequency (RF) micro-cautery apparatus for stylectomy, which is much cheaper and easier to handle than a laser micro-cautery.

Look at aphidzapper.com