

# Host-plant chemicals and distribution of Neuquenaphis on Nothofagus

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Extractable metabolites from leaves (EM) and volatiles released from six *Nothofagus* species were analyzed by TLC and GC-MS, respectively. Aphids of the genus *Neuquenaphis*, closely associated to *Nothofagus*, were sampled on each *Nothofagus* species. Cluster analyses of *Nothofagus* species were performed based on the presence or absence of EM and volatiles. Dissimilarity distances, from the cluster analyses of EM and volatiles, were used to evaluate their association with the aphid distribution. A major component identified from EM and volatiles of three species of *Nothofagus*, ?-agarofuran, was attractive to alates of the oligophagous *Neuquenaphis sensoriata*, which use them as hosts. These results suggest that chemicals play a significant role in the host-plant associations between *Neuquenaphis* and *Nothofagus*.