NASONOVIA RIBIS-NIGRI, A NEW APHID PEST FOUND ON LETTUCES (*LACTUCA SATIVA)* AND *RIBES* SPP. IN CANTERBURY

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An aphid new to New Zealand, *Nasonovia ribis-nigri* (currant-lettuce or lettuce aphid) was first found on lettuce plants in the greater Christchurch area in March 2002. The identity of the aphid was confirmed by Dr Victor Eastop, Natural History Museum, London, and by DNA analysis at Crop & Food Research. The aphids are found throughout infested plants, particularly in the heart of the lettuce where they are hidden from growers when plants are harvested**.** As a result, numerous infested lettuces were recently sent to local markets and other South Island areas, possibly spreading the aphid further. Mirroring overseas experience, the lettuce aphid has proved hard to control. In a period of 6 weeks, growers have had to plough in lettuce crops worth $200,000. Foliar insecticides have generally been ineffective because aphids inside the lettuce are not exposed to the active ingredient and some insecticide resistance may be present. Winged males, wingless egg-laying females and eggs of the lettuce aphid have also been found on its primary host *Ribes* spp. (e.g. currants and gooseberries). The lettuce aphid is a pest throughout Europe, south Central Asia, the Middle East, and North and South America, but has not been observed in Australia.

WOOLLY APPLE APHID RESISTANCE OF FIVE APPLE ACCESSIONS

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Woolly apple aphid (*Eriosoma lanigerum* Hausmann) is a widely distributed and important apple pest, causing damage on all the woody parts of the apple tree. The use of resistant rootstocks and cultivars is an effective way of controlling the pest. Sourcing new resistances is a significant aspect of a breeding strategy focused on durable resistances. We present the first findings of a study aimed at more exact measurement of resistance in apple germplasm. Four apple accessions (Roter Eiserapfel, Freiherr von Berlepsch, Willy Sharp and Braeburn) were compared to the susceptible cultivar Royal Gala for their resistance to woolly apple aphid. Each tree was inoculated with 25 first instar nymphs and the settlement was checked after 7 days. Development rate and survival of the nymphs were monitored daily from the first instar to adult. Colony establishment on each plant type was also assessed. Willy Sharp showed the highest degree of resistance with the lowest percentage of settlement and survival, and the lowest development rate. Roter Eiserapfel and Braeburn, which were not significantly different from Royal Gala in the aspects of resistance monitored, were found to be susceptible varieties. Freiherr von Berlepsch was considered moderately susceptible.