Quince (*Cydonia oblonga* Mill.), an unusual host for the giant willow aphid *Tuberolachnus salignus* Gmelin (Hemiptera: Aphididae) – In May 2022, colonies of the giant willow aphid *Tubercolachnus salignus* Gmelin were found on quince *Cydonia oblonga* in a town centre garden in Hertford (Herts, TL337130). No other reports of this large, distinctive aphid on this host plant could be found, its usual host being willows (*Salix* spp). May is also an unusual time of year to encounter this aphid, which has rarely been observed in spring (April to June). On 6 May 2022, colonies there were observed on four vertical branches (20–30 mm diameter) about 1.9 m above the ground. The colonies were all on the south side of the branches, approximately 100–150 mm in length and consisted of around 50 to 200 individuals including adults (alate and aptera) and nymphs. The colonies shrank over the month of May and were reduced to a single colony by 27 May, by 1 June no colonies could be found. No willows could be found in gardens close by, although willows are common and widespread in Hertford. The closest are likely to be those are Hertford Lock about 1 km to the north of the garden (Alan Mansfield, *pers. obs.*).

The dark brown giant willow aphid is one of the most distinctive species of aphid, due to its particularly large size (5.8 mm adult female alates), and the presence of a large black dorsal (often described as sharks-fin like) tubercle just in front of the siphunculae (Buckton, 1881; Dixon & Thieme, 2020). *Tuberolachnus salignus* belongs to the family Lachnidae which mostly live and feed on trees, is anholocyclic and no males or oviparous females or eggs have been discovered, with colonies made up of parthenogenetic females (alate and aptera) and nymphs only (Aradottir *et al.*, 2012; Blackman & Eastop, 1994; Bochniarz, 2020).

The aphid is often cited as being very host specific, only feeding on the phloem sap on the woody parts of a range of willows (*Salix* spp: Salicaceae) forming dense colonies on stems and branches, and there are known host preferences within the host genus (Collins *et al.*, 2001; Aradottir *et al.*, 2009). It has occasionally been reported on poplar (*Populus* spp Salicaceae), although this may be a 'temporary host' (Swirski, 1963). Apple (*Malus* spp; Rosaceae) has also been reported as host from North Wales and Northern Ireland (Theobald, 1929), and more recently in New Zealand over several years from 2016, where it caused serious damage to the plants (Wallis & Shaw, 2017). Theobald (1929) also reports this species on two further rosaceous hosts from India, the American plum (*Prunus americana* Marsh) and peach (*P. persica* (L.)). Despite an extensive search the authors can find no reports of this aphid on *Cydonia oblonga*. The aphids were clearly feeding on the plant and colonies consisted of both alate and apterous adults as well as nymphs (Fig. 1), clearly indicating successful feeding and reproduction.

The timing of occurrence of sizeable colonies in May is also interesting, as whilst the aphid has been regularly observed from July to February with a peak in September to October, where the aphid goes from April to June is often quoted as 'remaining a mystery' (Collins, Rosado & Leather, 2001; Collins *et al.,* 2001). The developmental threshold has been calculated at 5.5 ± 0.3°C (Collins, 2001), the mean number of reproductive days of this species is 10 and number of nymphs has been recorded as up to 37 per aphid. At 15 ± 1°C, nymphs moult at 4^{th}, 8^{th}, 13^{th}, and 18^{th} day from birth at all densities (Hargreaves & Llewellyn, 1978). Therefore, there should be no reason for this aphid's 'disappearance' during spring – although it has been suggested that it may spend this time deep within crevices of damaged *Salix* stems to avoid vertebrate predators (Dransfield & Brightwell, 2014). The observations in the southern hemisphere (New Zealand) broadly match those of the northern hemisphere, with peaks in February and March (equivalent to August and September). *Tuberolachnus salignus* has however been found on willows all year

Fig. 1. Colony of giant willow aphid (*Tubercolachnus salignus*) on quince (*Cydonia oblonga*). Alate, apterous and nymphs present, as well as a harlequin ladybird (*Harmonia axyridis*) adult, 6 May 2022. © Alan Mansfield.

in New Zealand, although in very small numbers as individuals or small clusters hidden in between petioles and stems in July–September (equivalent to February–April in northern hemisphere) (Sopow *et al*., 2017; Tun *et al*., 2021).

The observation made in spring 2022 of T. *salignus* on quince appears to be an unrecorded host of this aphid and an unusual time for large colonies to be observed. This single observation indicates that this aphid may be able to utilize previously unknown hosts other than *Salix* and can be active and visible between April and June. More observations are required however, to determine whether this is a rare occurrence, potential host-alternating behaviour, a genuine host range shift or some additional evidence to help solve the mystery of where this aphid goes in spring. – ANDREW SALISBURY, Plant Health (Entomology), Royal Horticultural Society's Garden, Wisley, Nr Woking GU23 6QB. *Email: andrewsalisbury@rhs.org.uk*, ALAN MANSFIELD, 123 Ware Road, Hertford, Hertfordshire SG13 7EE, GERRY EDWARDS, 24, Rodney Gardens, Pinner, Middlesex HA5 2RR & GUDBJORG I. ARADOTTIR, Mamoré Research and Innovation Limited, Harpenden AL5 5NG.

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FIELD MEETING REPORTS

Potts Corner, Lancashire Sunday 24 April 2022

Leader: **Stephen Palmer** – This was a joint meeting between the Lancashire Moth Group and the BENHS. Arranged to avoid Easter crowds and high tides, the annual event to look for adults of the Belted Beauty moth *Lycia zonaria zonaria* (D. & S.) at their last known site in England was finally back on the menu. During April 2020 and again in 2021, Covid restrictions meant it was cancelled and with it the opportunity to continue the important and previously unbroken long-term monitoring of the population of this rare species. It also allowed seasoned enthusiasts and beginners alike the chance to see a rare species close up and in its natural environment. Despite the strong probability of getting cold, wet or