

Asexual galls of the cynipid wasp *Andricus coriarius* (Hartig, 1843), new to Britain

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Introduction

Asexual galls of the cynipid wasp *Andricus coriarius* (Hartig, 1843) (Hymenoptera, Cynipidae) occur widely in continental Europe on a range of oaks (*Quercus* spp.; nomenclature for all *Quercus* species mentioned in the paper follows RBGK (2026)), and their distinctive form makes them readily identifiable in the field. These galls were found on oaks in the UK for the first time in 2025 at two sites in south-east England, approximately sixty miles apart, and the observations were uploaded to iNaturalist (Cook 2025; Fremlin 2025). An earlier record on iNaturalist (MacDonald 2024) was of an old, detached gall found on the Kent coast in March 2024, although its origin is unknown. However, galls with emergence holes were also found at several sites in Kent in Dec 2025 and dead adults retrieved (Bowdrey & Jennings in prep.). *A. coriarius* is not on the current checklist of British and Irish Hymenoptera – Cynipoidea (Forschage *et al.* 2017) or in Redfern *et al.* (2023) and is reported here for the first time.

On 18 September 2025, Paul Cook found a single gall formed on a Pedunculate Oak (*Quercus robur*) in Alexandra Park in the London Borough of Haringey, Greater London (VC 21, Middlesex), TQ 30184 90352. Alexandra Park is 196 acres of woodland, open grassland and formal gardens surrounding Alexandra Palace in North London. The tree was one of several of comparable size planted along Alexandra Palace Way. The tree had an estimated diameter at breast height of 68cm, and the gall was formed on a lateral bud of a NW-facing branch 2m above the ground. Despite careful searching of other accessible branches on the tree and on other oaks nearby, no other *A. coriarius* galls could be found. Further searches for the gall on other oaks in the park, mostly *Q. robur*, on 16 October 2025, also proved unsuccessful.

Fig. 1a shows the attached gall, which was still green at the time of collection. It was kept in a plastic box at 14.2-16.5°C and 56-58% humidity so that any emerging wasps could be examined and identified. Wasps began emerging from the gall on 31 October 2025, and ten wasps emerged over 7 days. Figure 1b shows the same gall as in Figure 1a, but after the wasps had emerged. The gall has been retained, as a delayed further emergence has been reported in the literature (Melika 2006). However, Schadewaldt (2009) failed to detect a second emergence in her detailed examination of the emergence pattern from *A. coriarius* galls collected from *Q. robur* in Germany.

Critical features of the wasps were examined with a micro-

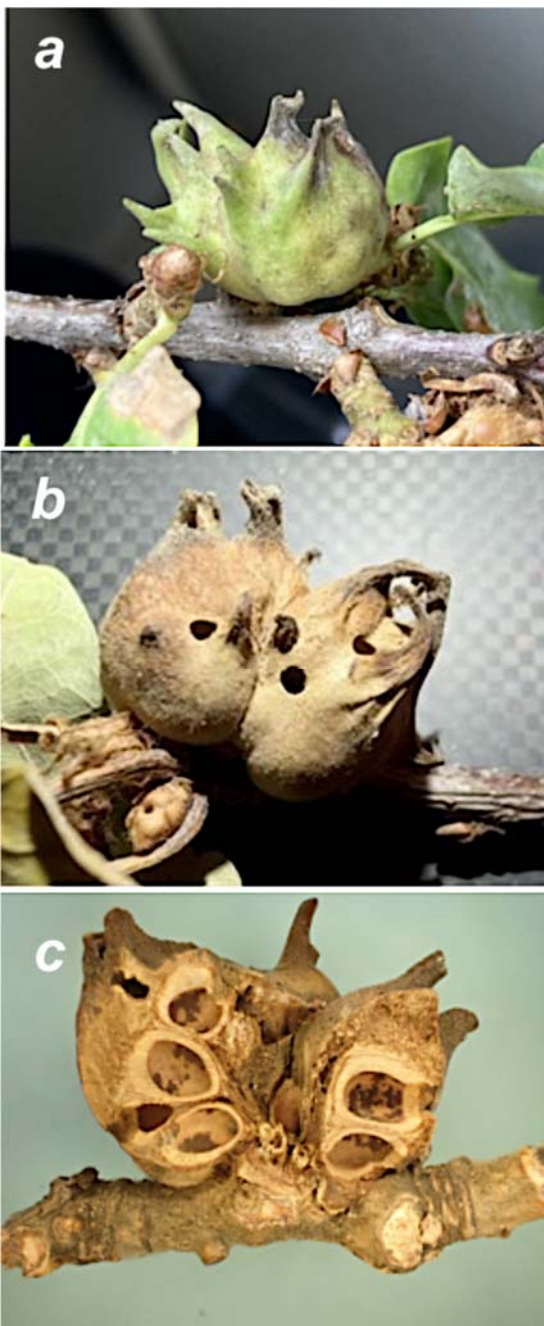


Figure 1 (right): *Andricus coriarius* asexual generation galls: (a) fresh gall, 18.5mm across, (b) the same following the emergence of gall wasps. Photos: P. Cook; (c) cross-section of a vacated gall, ~25 mm across. Photo: J. Bowdrey.

scope using the key and descriptions for *Andricus* spp. in Melika (2006). Fig. 2a shows the general habitus of the wasp. They were identified as *A. coriarius* asexual females based on having a coriaceous scutum, long setae on the anterior surface of the foretibia (Fig. 2b) and the presence of a short but wide, prominent part of the ventral spine of the hypopygium (Fig. 2c).

On 30 October 2025, Maria Fremlin found one brown gall of *A. coriarius* on Portuguese oak (*Quercus faginea*) growing on the University of Essex Campus, Colchester (vc19, North Essex), TM 02834 23651. But on a return visit on 19 January 2026, it was noticed that *A. coriarius* galls were present on branches over much of the tree, indicating that it was well established and all of them had emergence holes. The *Q. faginea* tree is part of the millennium oaks planting on the campus (Fremlin 2019), so at 25 years old, it is much younger than the *Q. robur* at Alexandra Park, which was estimated to be approximately 100 years old. Examining various *Quercus* trees on a further visit to the campus on 25 February 2026 revealed the presence of several *A. coriarius* galls on other oaks. These were labelled as Algerian Oak (*Q. canariensis* ‘Latifolia’) and Medlar-leaved Oak (*Q. petraea* ‘Mespilifolia’), all in the *Quercus* section and also millennium oaks (Fremlin, 2019), but not on any of the *Q. robur* trees that were examined in their vicinity.

The galls of *A. coriarius* are multilocular, having many chambers (see Fig. 1c), and it is interesting to note that Atkinson *et al.* (2002) provided evidence for the occurrence of multiple founding in *A. coriarius*, with the offspring of different mothers potentially coexisting within the same gall. The size of the galls and the arrangement of spines are reported to be quite variable (Nieves-Aldrey 2001; Schadewaldt 2009), and this is the case with the galls in the UK. Schadewaldt (2009) measured 120 galls (excluding spines) collected mostly from *Quercus petraea*, and the size ranged from 8.6 to 30mm.

Galls of the sexual generation of *A. coriarius* are reported to be cryptic bud galls (Stone *et al.* 2008). A photograph of these galls on *Q. ithaburensis* is included in the paper by Shachar *et al.* (2018) and described as being greenish-brown in colour and typically forming clusters of 15 or more tiny ($2\text{--}2.5 \times 1.5\text{mm}$) galls.

Discussion

Andricus coriarius is widely distributed in mainland Europe and is thought to have originated from the range expansion of a single lineage of probable Eastern origin 1.6 million years ago (Challis *et al.* 2007). The spread in Europe has been quite significant, with a gradual progression north and west from SE Europe. Figure 3 shows the current distribution based on GBIF data (GBIF 2026), including recent records from the UK. There are also distinct clusters in the

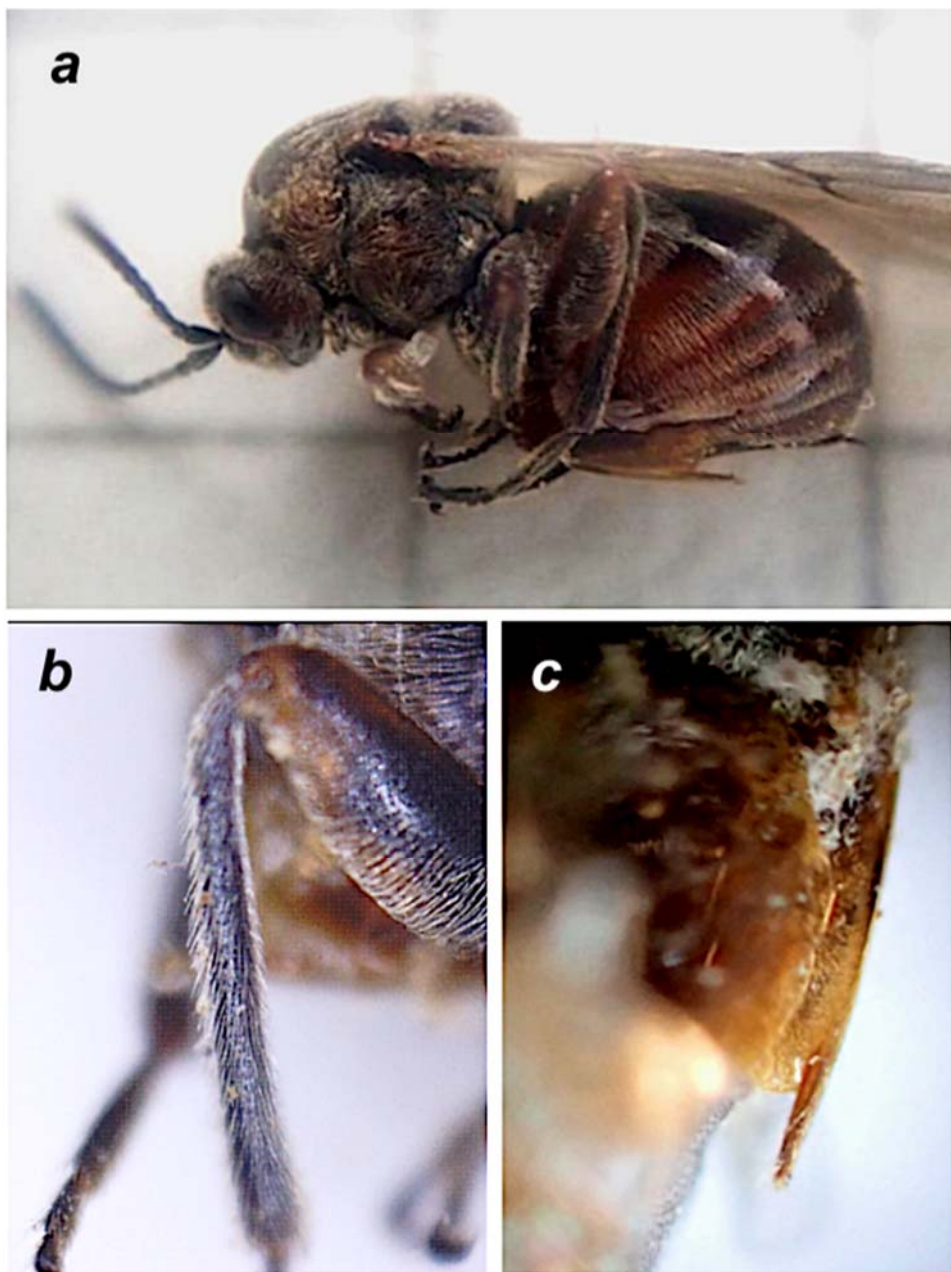


Figure 2: *Andricus coriarius* asexual female: (a) general habitus on a 3mm grid, (b) foretibia with long oblique setae. Photos: P. Cook; (c) the prominent part of the ventral spine of the hypopygium. Photo: J. Bowdrey.

Netherlands, which is of particular interest given the proximity to south-east England, where the recent records have occurred. According to the recording website Observation.org (Observation 2026) the gall is considered common in the recording area, which comprises mostly the Netherlands and Belgium. The most northerly European record to date is from Denmark in August 2024 (Haarder 2024).



Figure 3: Distribution of *Andricus coriarius* based on records held by the Global Biodiversity Information Facility. The data was sourced from GBIF (2026), and the map was produced using QGIS (QGIS Development Team 2024). Map: © OpenStreetMap contributors.

A. coriarius asexual galls have been reported from a wide range of oaks belonging to *Quercus* subgenus *Quercus* section *Quercus* (Denk *et al.* 2017). The galls have been reported on *Q. canariensis*, *Q. dalechampii*, *Q. faginea*, *Q. frainetto*, *Q. hartwissiana*, *Q. infectoria*, *Q. lusitanica*, *Q. macranthera*, *Q. petraea*, *Q. pubescens*, *Q. pyrenaica*, *Q. robur* and *Q. vulcanica* (Askew *et al.* 2018; Bayrak & Avci 2019; Ellis 2026; Melika 2006, 2018; Nieves-Aldrey 2001; Puljas *et al.* 2025).

The sexual galls of *A. coriarius* have been reported from *Q. cerris*, *Q. ithaburensis* and *Q. libani* (Shachar *et al.* 2018). These oaks all belong to

Quercus subgenus *Cerris* section *Cerris* (Denk *et al.* 2017). Schadewaldt (2009) observed that in a parkland setting, the *Q. robur* and *Q. petraea* trees with galls were all close to trees of *Q. cerris*. With the arrival of *A. coriarius* in the UK, cecidologists should look out for the sexual galls on flowers and buds of *Q. cerris* and in parkland their hybrids such as *Quercus* × *hispanica*, or other oaks in the same section; for example, *Q. ithaburensis*, *Q. libani* and *Q. suber*.

Askew *et al.* (2013) listed nearly 50 species of parasitoids and inquilines from *A. coriarius* galls in Europe, although none have emerged from the Alexandra Park gall so far. Schadewaldt (2009) observed that following the arrival of *A. coriarius* on *Q. robur* and *Q. petraea* in a park in Wiesbaden, Germany, in 2006, the galls had a low incidence of parasitoids. It has previously been found that galls of *Andricus quercuscalicis* (Burgsdorf, 1783) at the advancing edge of their range may show differences in the associated parasitoids when compared to galls from their native range in continental Europe (Collins *et al.* 1983; Schönrogge *et al.* 1995), and a similar situation may occur with *A. coriarius* in Britain.

Acknowledgements

Giusy Roera for help identifying the galls on iNaturalist. Tommy Root for help with the identification of the galls on Facebook. Diana Hargrave for help with the campus fieldwork.

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