ANDRICUS NUDUS (HYM.: CYNIPIDAE) AND TAXOMYIA TAXI (DIPT.: CECIDOMYIIDAE): INSECTS NEW TO IRELAND

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Andricus nudus Adler (Hymenoptera: Cynipidae)

Co. Dublin: Castleknock (00837), 15.x.1994, gall on a ten year old pedunculate oak (*Quercus robur* L.) planted in a suburban garden, JPOC.

The gall occurred on an oak tree which in the authors' experience has been remarkable in attracting cynipid species. Purchased as a three year old bonzai tree, it was planted in a wild area of the garden in 1987 and has since thrived, now standing at *circa* four metres. The first coloniser was the causer of the silk button spangle gall (*Neuroterus numismalis* (Geoffroy in Fourcroy)) in 1992. Only a small number occurred on the leaves but these represented the first Irish record of the species which was subsequently found to be widespread (O'Connor *et al.*, 1993). The following year, common spangles (*N. quercusbaccarum* (L.)) and cola-nut galls (*Andricus lignicola* (Hartig)) were noted. By 1994, the former were extremely numerous on nearly every leaf and due to crowding, some occurred on the upper side of leaves. Oyster galls (*Andricus anthracina* (Curtis)) are now also present. Two other small oak trees of a similar age in the garden are unaffected by galls.

The spindle-shaped gall of *A. nudus* is a very distinctive one, often greenish in colour with reddish streaks as in the present specimen. It is readily identifiable using Eady and Quinlan (1963), Darlington (1975), Docters van Leeuwan (1982) or Redfern & Askew (1992). Popularly known as "Malphighi's galls", they give rise to parthenogenetic females in the spring after falling to the ground in the autumn. New to Ireland, *A. nudus* is considered to be rare in Great Britain. However, this may only reflect the difficulty of finding the gall which can be very inconspicuous on a tree. The Irish specimen was discovered while inspecting the oak for other galls. After leaving it to obtain an identification work, a full half-hour was required to relocate the gall although its general location was known. No other specimen has been found on the tree. A week later, considerable time was spent searching for the galls of *A. nudus* in the Killarney National Park, Co. Kerry, but without success.

Taxomyia taxi (Inchbald) (Diptera: Cecidomyiidae)

Co. Kerry: Killarney National Park (V9686), 22.x.1994, galls common on yews on the Muckross Peninsula, JPOC, PA & MAOC.

The galls of *T. taxi* were discovered while searching for *A. nudus* and other oak galls in the Park. The species is new to Ireland. The galls occurred in large numbers on yews (*Taxus baccata* L.) growing along Arthur Young's

walk on the Muckross Peninsula near the Colleen Bawn Rock. They varied in density from tree to tree, some of which were unaffected. The yew is a native tree to Ireland and Reenadinna Wood, adjacent to the present site, is the only surviving pure yew forest on the island (Nelson & Walsh, 1993). Immature and mature two-year artichoke galls predominated but mature one-year galls were also present. The latter provide a link between the two-year generations but are missing from some populations (Redfern & Askew, 1992). The life history and morphology of the early stages of *T. taxi* are described by Redfern (1975). The species is widely distributed, occurring in northern, western and central Europe (Skuhrava, 1986). In Britain, it probably occurs almost everywhere there are yew trees (Barnes, 1951). One of the parasitoids, *Mesopolobus diffinis* (Walker) which attacks *T. taxi* (Cameron & Redfern, 1978), has been recorded from Ireland (Graham, 1969) but it was not then known to parasitise *T. taxi*.

Voucher specimens of both species have been deposited in the National Museum of Ireland.

Acknowledgements

The authors are very grateful to D. Kelleher, J. Larner and P. O'Leary of the Killarney National Park for their kind assistance. The O'Connors are also indebted to Mrs Alice Norton for her gift of the Castleknock oak.

References

Barnes, H.F., 1951. *Gall midges of economic importance* **5**. *Gall midges of trees*. Crosby, Lockwood and Son, London.

Cameron, R.A.D. & Redfern, M., 1978. Population dynamics of two hymenopteran parasites of the yew gall midge *Taxomyia taxi* (Inchbald). *Ecol. Ent.* 3: 265-272.

Darlington, A., 1975. The pocket encylopaedia of plant galls in colour. Revised edition. Blandford Press, Dorset.

Docters van Leeuwen, W.M., 1982. Gallenboek. B.V.W.J. Thieme & CIE, Zuthphen.

Eady, R.D. & Quinlan, J., 1963. Hymenoptera Cynipoidea. Key to families and subfamilies, and Cynipinae (including galls). *Handbk Ident. Br. Insects* 8(1a): 1-81.

Graham, M.W.R. de V., 1969. The Pteromalidae of north-western Europe (Hymenoptera: Chalcidoidea). *Bull. Br. Mus. nat. Hist.* (Ent.) Suppl **16**: 1-908.

Nelson, E.C. & Walsh, W.F., 1993. Trees of Ireland. Native and naturalized. The Lilliput Press, Dublin.

O'Connor, J.P., O'Connor, M.A. & Wistow, S., 1993. Some records of Irish Cynipidae (Hymenoptera) including ten species new to Ireland. *Ir. Nat. J.* **24**: 321-325.

Redfern, M., 1975. The life history and morphology of the early stages of the yew gall midge *Taxomyia taxi* (Inchbald) (Diptera: Cecidomyiidae). *J. nat. Hist.* **9**: 513-533.

Redfern, M. & Askew, R.R., 1992. *Plant galls*. Naturalists' Handbooks 17. The Richmond Publishing Co Ltd, Slough.

Skuhrava, M., 1986. Family Cecidomyiidae. In Soós, Á. and Papp, L. (eds) *Catalogue of Palaearctic Diptera*. **4**: pp. 72-297. Akadémiai Kiadó, Budapest.



Ashe, Patrick and Wistow, S. 1995. "Andricus nudus (Hym.: Cynipidae) and Taxomyia taxi (Dipt.: Cecidomyiidae): insects new to Ireland." *The entomologist's record and journal of variation* 107, 105–106.

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