

Case 2889***Mastotermes darwiniensis* Froggatt, 1897 and *Termes meridionalis* Froggatt, 1898 (currently *Amitermes meridionalis*) (Insecta, Isoptera): proposed retention of neotypes following rediscovery of syntypes**

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Abstract. The purpose of this application is to retain as the name-bearing types the neotypes designated by Hill (1942) of the Australian termites *Mastotermes darwiniensis* Froggatt, 1897 and *Termes meridionalis* Froggatt, 1898 despite the rediscovery of the syntypes of these species.

1. Froggatt (1897, p. 519) described *Mastotermes darwiniensis* from specimens including seven alates which Mr N. Holtze had collected 'flying round the lamp at night' at Palmerston, Port Darwin, N.T., Australia. Froggatt (1898, p. 726) later described *Termes meridionalis* (currently *Amitermes meridionalis*) from specimens (soldiers and workers) which Mr Holtze had collected 'direct from the nests' about 16 km inland from Palmerston. As was his custom, Froggatt did not designate type specimens of either species, instead referring in a general way to the material that he had before him. These two species attracted extensive comment in later publications (cited by Hill, 1942), primarily because of the morphologically primitive features and destructiveness of *Mastotermes darwiniensis* and the 'magnetically' oriented mounds of *Amitermes meridionalis*.

2. In a major revision of termites from the Australian region, Hill (1942) sought to stabilise nomenclature by the designation of type specimens for these two species amongst others.

3. In the case of *Mastotermes darwiniensis*, Hill (1942, p. 21) commented: 'Types appear not to have been selected by Froggatt, or, if selected, they have been lost. From material collected at Port Darwin and determined by Froggatt, 1 [sic] designate a winged adult and a soldier as holoneotype and morphoneotype respectively. These specimens are in the C.S.I.R. Collection'. The neotype female alate is now registered as Type No. 9033 in the Australian National Insect Collection, CSIRO, Canberra (ANIC); it is accompanied by a label '*Mastotermes darwiniensis* Frogg Pt Darwin N. Aust', in pencil in Froggatt's hand.

4. In the case of *Termes meridionalis*, Hill (1942, p. 336) commented: 'As Froggatt's specimens are now in poor condition and are not labelled as belonging to his type series, I select the holoneotype soldier and morphoneotype winged adult and worker from a complete nest series taken from a characteristic nest in the type locality on 28th September, 1932. These types are in C.S.I.R. Collection'. The neotype soldier is now registered as Type No. 9077 in ANIC. The Froggatt series to which Hill referred (now ANIC series No. 17713) contains nymphs, soldiers and workers, and bears the labels '*Termes meridionalis* Frogga' (end of label missing) and '8. Magnetic

nest termite Pt Darwin', in pencil in Froggatt's hand. There is no label to indicate that the specimens are types, but it was not Froggatt's custom to affix such labels; nor is there any mention of the collector, although Froggatt commonly named the collector on his labels. These specimens of *A. meridionalis* from the Froggatt collection need not therefore be regarded as syntypes, although this possibility cannot be ruled out.

5. During a recent check of termite material held in the Museum of Victoria, Melbourne (NMV), I found a jar containing vials of termites from the Froggatt collection. Among them are what appear to be syntypes of *Mastotermes darwiniensis* and *Termes meridionalis*.

6. The specimen of *Mastotermes darwiniensis* is a female alate, with the pencil labels in Froggatt's hand 'Pt Darwin N. Terr. Holtze 1895 32' and 'Mastotermes darwiniensis Froggatt'. The series of *Termes meridionalis* includes nymphs and workers, labelled 'Magnetic Nest Holtze. Pt Darwin' and 'Termes meridionalis Froggatt', again in pencil in Froggatt's hand. These labels indicate that the specimens are syntypes, even though Froggatt did not mention nymphs among his material of *A. meridionalis*. The jar also contains a label in Hill's hand detailing its contents, indicating that Hill had at one time seen these Froggatt specimens. The label reads: 'Pres. by W W Froggatt Esq. 7.10.98. list written by G F Hill 2.12.25.' and 'Mastot. darwiniensis Frogg. imago co-type.' and 'Hamit. meridionalis workers + nymphs ex type col.'. It is clear that Hill did not have the Froggatt material now in NMV in front of him when he compiled his 1942 monograph during the late 1930s, but he did examine other material from the Museum of Victoria. Thus the vial in NMV containing the type series of *Leucotermes barretti* Hill, 1927 has a label in Hill's hand dated '14.9.38' and there is an annotation dated '9.3.38' on his working copy of his 1927 paper (see Watson & Abbey, 1994). I can only presume that the jar containing Froggatt's type series of *M. darwiniensis* and *T. meridionalis* could not be located and that Hill believed it to be lost.

7. Article 75h of the Code states that 'if, after the designation of a neotype, the . . . syntypes of the nominal species-group taxon are found still to exist, the case is to be referred to the Commission to rule whether the neotype is or is not to be retained as the name-bearing type'. I now consider the situation for each of the species.

8. The syntype and the neotype of *M. darwiniensis* are in good condition, and are of the same caste and sex. The designation of the neotype was published in the major revision of the Australasian termites which is still a viable publication. The designation has thus had a substantial audience and has major taxonomic standing. No purpose would be gained in setting aside Hill's designation and reverting to Froggatt's syntype as the name-bearing type.

9. The status of species in the *Amitermes meridionalis* group is uncertain. However, the discovery of syntypic nymphs and workers of *A. meridionalis* does not contribute to the solution of these problems, since neither nymphs nor workers are suitable as name-bearers. The neotype soldier is essential for any revision of this group. It would therefore be a disservice to taxonomy to set aside Hill's designation of a soldier neotype and revert to one of Froggatt's nymph or worker syntypes as the name-bearing type, all the more so since, as with *Mastotermes darwiniensis*, the designation has had a substantial audience and has major taxonomic standing.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to confirm:
 - (a) as the name-bearing type for *Mastotermes darwiniensis* Froggatt, 1897 the neotype designated by Hill (1942) registered as Type No. 9033 in the Australian National Insect Collection;
 - (b) as the name-bearing type for *Termes meridionalis* Froggatt, 1898 the neotype designated by Hill (1942) registered as Type No. 9077 in the Australian National Insect Collection;
- (2) to place the following names on the Official List of Specific Names in Zoology:
 - (a) *darwiniensis* Froggatt, 1897, as published in the binomen *Mastotermes darwiniensis* and as defined by the neotype designated by Hill (1942) and registered as Type No. 9033 in the Australian National Insect Collection;
 - (b) *meridionalis* Froggatt, 1898, as published in the binomen *Termes meridionalis* and as defined by the neotype designated by Hill (1942) and registered as Type No. 9077 in the Australian National Insect Collection.

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