

First North Island record of *Cawthronia nigra* (Mycetophilidae)

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Introduction

The monotypic *Cawthronia nigra* (Mycetophilidae) is a fungus gnat from the Leiini tribe that is endemic to New Zealand (Jaschoff & Kallweit 2009). Very little is known about the life history of this genus and it appears to be very uncommon. The genus was erected by Tonnoir & Edwards (1927) from two specimens collected at Cawthron Institute (which the name is presumably derived from) in Nelson. It appears to be most morphologically similar to *Anomalomyia*, a genera with species in New Zealand and New Caledonia (Jaschoff & Kallweit 2009). When *C. nigra* was revised by Jaschoff & Kallweit (2009), it was reported to be restricted to the South Island of New Zealand.

The author has recently identified one specimen of *C. nigra* from the Rangipo Desert in the Central Plateau of the North Island. The species is easily recognized by its distinctive wing veins and markings (Figure 1) This represents the first record of *C. nigra* outside of the South Island of New Zealand. The author has compiled a list of all previously reported records and all specimens of *C. nigra* from museums in New Zealand (Table 1). The current known distribution is displayed in Figure 2.



Figure 1. Distinctive wing of Rangipo Desert specimen

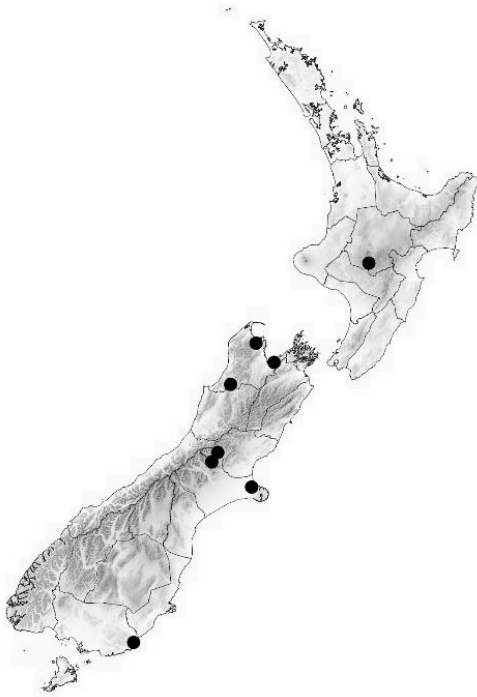


Figure 2. Distribution map of *Cawthronia nigra*

There were no morphological features to indicate that the newly identified specimens differed from those in the South Island. However, it is worth noting that all other specimens were collected from forest habitats whereas the Rangipo Desert specimens were collected from native red tussock and exotic heather grasslands.

It is probable that this record is within its natural range, rather than a recent introduction from the South Island. Presumably the fungus gnat is present in numerous other localities in the North Island, albeit in small numbers. Further sampling throughout the North Island will likely uncover new records of this species and reveal its true geographic extent.

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References

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Table 1. Summary of all known *Cawthronia nigra* specimens: sex, entomological district (Ento Dist), Locality (SR-Scenic Reserve; FP-Forest Park; MB-Mid Bush; NP-National Park; BP-Banks Peninsula), collection date, collector (Collr: EE-E Effah; ALT-AL Tonnoir; MJ-M Jaschhof; MCJ-M & C Jaschhof; PMJ - PM Johns), Type (Holotype; Paratype), Collection (Colln) where specimen stored (MONZ-Museum of New Zealand; CMNZ-Canterbury Museum New Zealand; NZAC-New Zealand Arthropod Collection), specimen registration number, and publication where record is listed (NR-new record; T&E-Tonnoir & Edwards 1927; J&K-Jaschhof & Kallweit 2009; B-Bowie et al. 2003). * - described in this paper

Sex	Ento Dist	Precise locality	Date	Collr	Type	Colln	Reg number	Rec
1♀	TO	Rangipo Desert	27/11/2017	EE	n/a	MONZ	AI.052709	NR*
?	MC	Charteris Bay, BP	21/11/1925	ALT	n/a	CMNZ	2007.202.1177	NR
1♀	NN	Nelson	01/11/1923		Hol	NZAC	NZAC04021308	T&E
1♀	NN	Nelson	14/11/1923		Para	NZAC	NZAC04020804	T&E
1♂	SL	Purakaunui SR	30/01/2002	MJ	n/a			J&K
1♂	MC	Craigieburn FP, Skifield Rd	04/12/2001	MJ	n/a			J&K
3♂	NC	Arthur's Pass, Bealey Spur	19/5-13/6/2001	MCJ	n/a			J&K
1♂	BR	Shenandoah Saddle	3-25/11/2001	MCJ	n/a			J&K
3♂ 1♀	NC/ MC	Cass, MB	30/05/1998	PMJ	n/a			J&K
4♂ 4♀	NC/ MC	Cass, MB	11/04/1998	PMJ	n/a			J&K
18♂ 9♀	NC/ MC	Cass, MB	09/04/1998	PMJ	n/a			J&K
6♂	NN	Kahurangi NP, Cobb dam Rd	31/8-7/10/2001	MCJ	n/a			J&K
?	MC	Quail Island, BP	Early 2000s	?	n/a			B