

Label Data (Box #1) n. spp. NZ Lucanidae, Automontages
(Copy sent to Luca 28 Nov 2007)

✓ Geodorcus alsobius Holloway, 2007.

1) Holotype male: New Zealand, CL, Mt Moehau, under log in last patch of bush before summit of Little Moehau, November 1980, J.J. Goulstone. [NZAC]

✓ 2) Paratype female: New Zealand, CL, Mt Moehau, bush edge, ~~S10: 292~~ S10: 254/159, 6 Jan 1992, R. Thorpe [NZAC]

✓ Geodorcus montivagus Holloway, 2007

3) Holotype female: New Zealand, BR, Victoria Range, 4000' (= 1220m), in tussock, 30 January 1973, R.R. Jordan [NZAC]

✓ Geodorcus servandus Holloway, 2007

4) ~~New~~ Holotype male: New Zealand, BR, Mt Tuhua summit 1122 m, 4 Dec 1960, P.R. Kettle [NZAC]

✓ 5) Paratype female: New Zealand, BR, Mt Tuhua 1122m 4 Dec 1960, P.R. Kettle, under Celmisia [NZAC]

✓ Geodorcus sororum Holloway 2007

6) ~~Holotype~~ Paratype female, Chatham Islands, Middle Sister Is, 12 Jan 1990, R. Chappell [LUNZ]

✓ 7) Paratype female: ~~Chatham Islands~~ CH: [Chatham Islands], Middle Sister I, ^{12 Feb 1977} A. Wright, under fern, No. 69, The Sisters Expedition. [NZAC]

Box #1 Lucanidae FNZ 61

Automontage Specimens (not in spp)

1. Geodorcus auriculatus ♂ NZ: BP: Summit of Mt Te Aroha, 950m
8 Jan 1986, J. Welsh. Dead in water channel on side of road. (NZAC)
Geodorcus auriculatus ♀ NZ: BP: ~~Summit~~ Mt Te Aroha, 900m,
10 Jan 1986, B A Holloway. Dead on track (NZAC)
2. Geodorcus capito ♂ NZ: CH: Rangitira, 27 Nov. 1992, P. Syrett,
on tree at night (LUNZ).
Geodorcus capito ♀ NZ: CH: Rangitira, 27 Nov 1992, P. Syrett,
on tree at night (LUNZ).
3. Geodorcus helmsi ♂ NZ: FD: Bauza I, March 1984, C.F. Butcher,
pit trap 21/7. NZAC
Geodorcus helmsi ♂ NZ: SL: Greenhills, Bluff, 17 Jan 1959,
J.I. Townsend (NZAC) [frontispiece specimen]
Geodorcus helmsi ♀ NZ: SL: Bluff Hill, 21 July 1966 R.M. Bull,
(NZAC)
4. Geodorcus novaezealandiae ♂ + ♀ ~~both~~ NZ: WN: Wiltons Bush,
27 Mar 1959, R.M. Bull (Both NZAC)
5. Geodorcus pulpothi ♂ + ♀ NZ: SL: Hump Ridge, 3000', 15 Feb 1963,
J.I. Townsend (NZAC)
6. Geodorcus ihaginiis ♂ NZ: ND: Mokoia Is, Stadé H,
3 Jan 1984, P. Southey NZAC
Geodorcus ihaginiis ♀ NZ: NZ T Brown Dup Coll No other data
(NZAC)

Label data of Automontage specimens FNZ 61

1. Dendrobax earlic ♂ D. 10 NZ: Te Matai Rd, Palmerston North,
12 Nov 1959, R.M. Bull [Illustr. D. Helmore] (NZAC)
2. Dendrobax earlic ♀ NZ. Oio, 20 July 1936, G. Gardner (NZAC)
3. Ryssonotus nebulosus ♂ NZ: AK: Allendale Rd, Mt Albert, 9 Jan 1984,
C. Hanna, in kitchen (NZAC)
- Ryssonotus nebulosus ♀ Gisborne, 3 Jan 1964, in dead Acacia
stump, Dept of Agriculture (NZAC)
4. Paralissotes reticulatus ♂ NZ: Maungaraki, Hutt Valley, 15 Jan 1968,
R.M. Bull (NZAC) [Illustr. D. Helmore]
- Paralissotes reticulatus ♀ NZ: Lower Hector Track [Tararua Rg.], 29 Nov 1958,
R.M. Bull (NZAC)
5. Paralissotes rufipes ♂ NZ: [NN] Upper Maitai, 20 Nov 1938, E.S. Gourlay
[compared with Type of Lissotes rufipes, Nov 1957, B.A. Holloway] (NZAC)
- Paralissotes rufipes ♀ NZ: D'Urville I., Mt Woore, 22 Feb 1964, in mixed
Nothofagus bush, Malcolm Douglas (LUNZ)
6. Paralissotes planus ♂ NZ, ND: Te Koroa Reserve, Maungataniwha Ra.,
18 Nov. 1985, in rotten Hoheria log, B.A. Holloway (NZAC)
- Paralissotes planus ♀ NZ: ND: Waima, 17 Nov 1985, in rotten log,
G.M. Herbert (NZAC)
7. Paralissotes stewarti ♂ NZ, BP: Waiorata, NZMS 260 Y14, 652866
29 Sep 1993, under log, C.A. Stewart, East Cape Insect Survey 1992/3 (LUNZ)
- Paralissotes stewarti ♀ NZ, ND, Kara Forest, Whangarei, 15 Oct 1927,
E. Fairburn (NZAC)
8. Paralissotes mangonuiensis ♂ NZ, ND: Punururu Strm, Russell S.F.
9 Aug 1985, K.J. + J.P. Fox (NZAC) In dead fallen kanuka log.
- Paralissotes mangonuiensis ♀, NZ: ND: Punururu Strm, Russell S.F.
9 Aug 1985 K.J. + J.P. Fox, in dead fallen kanuka log. NZAC.
9. Paralissotes oconnori ♂ ND Pandora, Spirits Bay, Northern NZ, Jan 1949,
A.C. O'Connor, Paratype (NZAC)
- Paralissotes oconnori ♀ NZ ND, Kauri Bush, nr Mt Te Pahi, under rotten
tree fern log, 27 Oct 1985, W.Eivers (NZAC)
10. Paralissotes triregius ♂ Three Kings Is, Great I. Nov 1970, NZ Ent Div Exp.
G. Kuschel, 900', under stones (NZAC)
- Paralissotes triregius ♀ Three Kings Is, Great I. Nov 1970, NZ Ent Div Exp.
J.C. Watt, under bark of partly dead Leptospermum (NZAC)
11. Serrogathus sika ♂ ~~♀~~ Taiwan, det Bartolozzi 2001, Drawn Helmore 17.05.04.
(NZAC)
- Serrogathus sika ♀ Taiwan, no other data, gift from Bartolozzi 2001, det Bartolozzi
2001 (NZAC)

LUNZ
~~W~~

LUNZ
→

(LUNZ)
~~(NZAC)~~

Box #2

X = returned to LUNZ box

Label data (info) of Automontage Specimens FNZ61

11. Lamprima aurata ♂ Australia: Tasmania, Cunningham, 28.xi.83.G & P. Bornemissza. det Bornemissza 1983. Drawn Helmore
4.12.90. (NZAC)Lamprima aurata ♀ Australia: Hobart, Tas, Dec 82. G. F.

Bornemissza, Exchange GF Bornemissza 1984, det Bornemissza 1984 (NZAC)

12. Mitophyllus macrocerus ♂ NZ ND: Te Matua Ngahere, WaipouaForest, 4 Feb 1975, swept, R.H. Blank (LUNZ) Drawn
Helmore 24.6.06.13. Mitophyllus fuscus ♂ NZ: SL: Catlins SF, Hunters Hills, 550 m,

8.11.1982 R.M. Emberson, under bark of Nothofagus. (LUNZ)

Mitophyllus fuscus ♀ NZ: SL: Catlins SF, Hunters Hills, 550 m

8.11.1982 R.M. Emberson, under bark of Nothofagus (LUNZ)

Box #3

Label data of Automontage specimens FNZ61

Paratype ① Mitophyllus solox ♂ NZ: BP: Otago Bush, NZMS 260 Y14 662923,
LUNZ 12 Mar 1993, J.W.M. Marris, ex rotten log, East Cape Insect Survey 1992/93 (LUNZ)

Para type
LUNZ Mitophyllus solox ♀ NZ: GB, Kakanui 300m, NZMS 260 Z14 876806,
18 Feb 1993, R.M. Emberson, Pitfall trap, Nothofagus truncata forest,
East Cape Insect Survey 1992/93 (LUNZ)

MONZ ② Mitophyllus irroratus ♂ NZ: WN, Coastline 0-200m, Turakirae Head, 16 Dec 1981
rotten logs, N. Elvidge + C.W. Hornabrooks, Wellington Coast Botany Survey (MONZ)

MONZ Mitophyllus irroratus ♀ NZ: WN, Coastline 0-200m, Turakirae Head, 16 Dec 1981
rotten logs, N. Elvidge + C.W. Hornabrook, Wellington Coast Botany Survey (MONZ)

MONZ ③ Mitophyllus gibbosus ♂ #164 d Hudson Collⁿ (MONZ)
MONZ → Mitophyllus gibbosus ♀ #164 f Hudson Collⁿ (MONZ)

LUNZ ④ Mitophyllus insignis ♂ NZ: NN: L. Sylvester, 9 Feb 1985, under stones,
→ S.P. Wornier (LUNZ)

LUNZ Mitophyllus insignis ♀ NZ: OL, L. Howden, 750m, 8 Feb 1980, under bark
C.A. Muir (LUNZ)

MONZ ⑤ Mitophyllus alboquittatus ♂ 900 d Hudson Collⁿ (MONZ)

LUNZ Mitophyllus alboquittatus ♀ NZ: FD, Fiordland NP, S. Borlana Biv.,
730m, 2 Nov 1982, C.A. Muir, moss at night in Nothofagus forest (LUNZ)

MONZ ⑥ Mitophyllus angusticeps ♂ 1145 b Hudson Collⁿ (MONZ)
MONZ Mitophyllus angusticeps ♀ 1145 c Hudson Collⁿ (MONZ)

LUNZ ⑦ Mitophyllus reflexus ♂ NZ: CH P.H.I., Canister Cove Scientific Res.,
→ 12 Jan 1990, C.A. Muir (LUNZ) In rotten wood.

LUNZ Mitophyllus reflexus ♀ NZ: CH, Rangitira, 29 Nov 1992, P. Syrett,
→ on tree at night (LUNZ)

Box #4

Label data of Automontage specimens

FNZ 61

MONZ (1) Mitophyllus dispar ♂ Hudson Collⁿ (MONZ) 1151a

MONZ Mitophyllus dispar ♀ Hudson Collⁿ 1151c (MONZ)

(2) Mitophyllus macrocerus ♀ NZ: ND: Wairau Summit 457m, Waipoua SF
18 Oct 1967, JS Dugdale. [Em] 5 Jan 1968, reared, W67/106 (NZAC)

(3) Mitophyllus arcuatus ♂ NZ: ND: Aupori Peninsula, nr Paparore,
26 Oct 1985, C.J Green, Reared Ulex europaeus, EM 27 Feb 1986, (NZAC)

Mitophyllus arcuatus ♀ NZ: BP Okauia, 5 Mar 1921 AEBrookes Collⁿ (NZAC)

(4) Mitophyllus falcatus ♂ NZ: AK: Lynfield, 10 Aug 1980, G Kuschel,
Malaise trap 4. (NZAC) Paratype.

Mitophyllus falcatus ♀: NZ: AK: Lynfield, 9 Nov 1980, G. Kuschel,
Malaise trap 5 (NZAC) Paratype.

(5) Mitophyllus foveolatus ♂: NZ: BR: Fletchers Creek, nr Reefton, 9 Nov 1971,
JS Dugdale (NZAC)

Mitophyllus foveolatus ♀: NZ: W: Wairoa Gorge, 9 Apr 1950 E.S. Gourlay
(NZAC) 8 Oct 1959

(6) Mitophyllus parvianus ♂: NZ: GB: Tokomaru Gorge, R.M. Bull, R.M. Bull Collⁿ
(NZAC)

Mitophyllus parvianus ♀ NZ: GB: Tokomaru Gorge, R.M. Bull, 8 Oct 1959,
R.M. Bull Collⁿ (NZAC)

(7) Holloceratognathus cylindricus ♂ NZ: NN: Takaka Hill, 2500', 7 May 1957,
E.S. Gourlay (NZAC)

Holloceratognathus cylindricus ♀ NZ: WN: Karori, Wellington, 31 Dec 1928,
2800, E Fairburn, Mitophyllus cylindricus Brauer, AEBrookes Coll (NZAC)

(8) Holloceratognathus helotoides ♂ NZ: ^{NN} Mackays Bluff, 2000' Nelson,
8 Nov 1944, E.S. Gourlay (NZAC)

Holloceratognathus helotoides ♀ NZ: MB: Awakere River, 1200', 10 Dec 1959,
B.B. Given (NZAC)

(9) Holloceratognathus passaliformis ♂ NZ: WN: PARATYPE, Jacobs Ladder,
Orongorongo Valley, Orongorongo District, In nest of Prolasius advena (F.R. Smith)
25 Jan 1961, D. Edwards, R.G. Ordish, B.A. Holloway (NZAC) ^{Gift to NZAC from MONZ 1985}

Holloceratognathus passaliformis ♀ NZ: WN: PARATYPE, Jacobs Ladder,
Orongorongo Valley, Orongorongo District, In nest of Prolasius advena (F.R. Smith)
25 Jan 1961, D. Edwards, R.G. Ordish, B.A. Holloway (NZAC) ^{Gift to NZAC from MONZ 1985}

(10) Syndesus cornutus ♂ NZ: AK: Otahuhu, infesting oak door post, Kings
College Chapel, 27 Jan 1965 [no collector] (NZAC)

Syndesus cornutus ♀ NZ: AK: Lynfield, 23 Feb 2007, dead in [swimming]
pool, B.A. Holloway (NZAC)

①

Holloceratognathus cylindricus (Brown)

①

- NN 2♂^{41°26'}_{172°56'} ♀ Pelly Bridge L[ight]T[rap], Nelson, 9 Feb 1966, G.J.H[Litchings] (NZAC)
- " 1♂^{172°56'} " " Valley, Nelson, 21 Jan 1965, Light Trap, D.C.F. Perrott (NZAC)
- " 1♂^{172°54'} " " L.T., 2 Feb 1966, G.J.H[Litchings] (NZAC)
- CL 1♂^{37°17'}_{176°15'} Mayor Island, 27 Dec 1955, R.M. Bull Collⁿ (NZAC)
- WN 1♂^{41°06'}_{174°50'} Titahi Bay, -/12/18, [coll?] (NZAC)
- NN 1♂^{41°01'}_{172°54'} Takaka Hill, 2000', 7 May 1957, E.S. Gourlay (NZAC)
- WN 1♂ 5♀ Karori, Wellington, 31 Dec 1928, E. Fairburn (NZAC) 41°17', 174°45' ✓
- RI 1♂^{40°09'}_{175°55'} Foot of Purity Ridge, 2000', Ruahine Ranges, 16 Jan 1960, flying at dusk, J.I. Townsend (NZAC) [Illustrated 11.6.91, D.W. Helmore] NZAC
- NN 1♂^{41°17'}_{173°20'} Moutai Saddle, Nelson, 22 Nov 1961, W.P. Thomas (NZAC)
- AK 1♂^{36°48'}_{175°05'} Waiheke Island, Jan 1944, G. Chamberlain (NZAC)
- AK 1♀ Tihirangi 8 Feb 1945, M.W. Carter (NZAC) 36°57', 174°40' ✓
- CL 2♂^{36°12'}_{175°04'} sex undetermined Little Barrier I., 1913, H. Swale (BMNH) [Holloway 1961]
- WI 1♂^{39°57'}_{174°59'} Castlecliff, Wanganui, 10 Jan 1919, A.C. O'Connor (NMNZ) [" "]
- WN 1♀ Levin, 8 Aug 1909, A.C. O'Connor (NMNZ) 40°38', 175°18" [" "]
- WN 2♂^{41°20'}_{174°47'} Titahi Bay, 12 Jan 1919, A.C. O'Connor (NMNZ) [" "]
- WN 2♂^{41°20'}_{174°47'} Island Bay [Wellington] 1908, A.C. O'Connor (NMNZ) [" "]
- WN 2♂ 3♀ Johnstons Hill, Karori, 25 Feb 1942, A. Pope (NMNZ) [" "]
- WN 1♀ Holotype, Wellington, [no date], J.H. Lewis (BMNH) [" "]
- MK 1 specimen sex undetermined, Hooker River, Mt. Cook, Dec 1928, S. Hudson, ^{43°44'}_{170°09'} (BMNH) [ex Holloway 1961]

Specs examined Holotype ♀ [check sex, ? lectotype] + 33 non-type specimens (16 males, 14 females, 3 sex undetermined). (BMNH, NMNZ, NZAC)

incl. Little Barrier + Mayor Islands

AK, CL, RI, WI, WN, NN, MK from near sea level to about 610m. Northernmost record: Little Barrier I. (CL) 36°12'S; southernmost record Hooker River, Mt. Cook (MK) 43°44'S. Adults collected November to February, May, August. In rotten logs (~~Hudson 1934~~) and in light traps, also flying at dusk. Type collected under bark of Dacrydium cupressinum (Rimu). Hudson (1934) reported finding larvae + adults in ~~the~~ well decayed wood.

Holloceratognathus helotoides (Thomson)

- NN 2♂ Motupiko, 30 Sep 1934, G. Hole (NZAC) 41°27', 172°49'
- CH 1♂ Chatham Is., Jan 1938, Mrs N.G. Mitchell (NZAC)
- CH(SE) 6♂ 11♀ South East I, Chatham Is., Nov 5, 1970, dead branch Olearia traversii, J I Townsend (NZAC)
- CH 1♂ Rotoparapa, 12 Feb 1967, Chatham I. Expedⁿ 1967, G Kuschel (NZAC)
- CH(SE) 1♂ South East I, Chatham Is., 5 Nov 1970, beating dead branch Olearia traversii, J I Townsend (NZAC)
- 1♂ [no locality] 449, T Brown Duplicate Collⁿ (NZAC)
- CH 2♂ 2♀ Maunganui, ^{Chatham I.} 567' 3 Mar 67, Dead wood, Chatham I. Expedⁿ 1967, A K Walker [These are general specimens I assume ~~they were~~ reared in Nelson] (NZAC)
- BR 2♂ 3♀ Ha L. Rotoiti, Travers R., 11 Oct 1964, ex rotten log, A K Walker (NZAC) 41°53', 172°50'
- BR 1♂ 1♀ Capleson, 21 Sept 72, Nothofagus log, assoc. larvae in alcohol, J.C. Watt [specimen general so presumably in the log] (NZAC) 42°04', 171°55'
- BR 1♂ 42°04', 171°55' Capleson, 21 Sept 72, Nothofagus log, associated larvae in alcohol, Ceratognathus helotoides PHOTOGRAPH, ~~and~~ J.C. Watt, (NZAC)
- CH(PH) 1♂ 1♀ Glory Bay Pitt I., 1 Mar 67, G. Kuschel, Chatham I. Expⁿ Feb 67 (NZAC)
- CH 1♂ 1♀ Waitangi, ^{Chatham I.} 9 Feb 67, in crown of 'niggerhead', E.W. Valentine Chath. I. Ex Feb 67 (NZAC)
- NN 1♂ 41°15', 172°35' Baton Saddle, 4500', 10 Jan 61, J I Townsend, R M Ball Collⁿ (NZAC)
- CH 1♂ 1♀ Waitangi, ^{Chatham I.} 17 Feb 67, dead wood, A K Walker, Chath. I. Ex Feb 67 (NZAC) Abscemen missing
- CH 1♂ 1♀ Awatotoa Tablelands, Chatham Is., 15 Feb 67, Reared from Pseudopanax chathamica, G. Kuschel (NZAC)
- CH(SE) 1♂ 1♀ SE Island, 121m, Chatham Is., 11 Nov 70, reared from Myrsine chathamica, em 8 Jan 72, J I Townsend (NZAC)
- CH(PH) 1♂ 1♀ Pitt I., 16-26 Jan 44, E S Gourlay (NZAC)
- GB 1♂ 38°28', 177°53' 15 miles N of Gisborne, under dry bark of dead karaka [nod.] (NZAC) 15 miles = 24 km
- WD 1♂ 43°23', 170°11' Waioho Gorge, Westland, 15 Jan 1925, C.E. Clarke, A E Brookes Collⁿ (NZAC)
- CH 1♂ 1♀ Chatham Is., 10, Brown Coll., A E Brookes Collⁿ (NZAC)
- MC 1♂ 43°29', 172°07' Darfield, Jan 51, E.W. Valentine (NZAC)
- MB 1♂ 2♀ Awatere River, 1200', 10 Dec 59, B.B. Given (NZAC) 41°48', 173°49'
- MC 1♂ 43°27', 171°36' Little River in hardwood poles [nod.] (NZAC)
- TO 1♂ 36°58', 175°46' Tokaanui, 6 Apr 1918, 449, T Brown Dup Coll. (NZAC)
- 1♂ [no locality] 449, A E Brookes Coll (NZAC)
- NN 1♂ Mackays Bluff, 2000', Nelson, 8 Nov 44, E S Gourlay (NZAC)
- CH (Mang) 1♂ 1♀ Mangere I. Chatham Is., 4-11 Jan 1924, C. Lindsay, 10, A E Brookes Coll. (NZAC)
- MC 43°49', 172°55' 1♀ Akaroa, 449, T Brown Dup. Coll. (NZAC)
- 1♀ [no locality] Brown Coll. 1919, 449, A E Brookes Coll. (NZAC)
- CH 1♀ Chatham Is. Ceratognathus helotoides [nod.] (NZAC) [Badly damaged with Verticillium]
- OL 44°46', 168°08' 1♀ Hollyford River bed, ex dead log, 10 Dec 66, A K Walker (NZAC)
- CH 1♀ Chatham Isd, 28-30 Jan 44, E S Gourlay (NZAC)
- CH 1♀ Tuku, ^{Chatham I.} 20 Feb 67, at or near beach, G Kuschel, Chath. I. Exp. Feb 1967 (NZAC)
- CH 43°46', 176°45' 1♀ Maunganui, ^{Chatham I.} 567' 3 Mar 67, dead wood, A K Walker, Chath. I. Exp Feb 67 [must have been reared at Nelson] (NZAC)
- CH 1♀ Awatotoara, Chatham Is Exped., 16 Feb 67, [nod.] (NZAC)
- CH 2♀ Rotoparapa, 12 Feb 67, G Kuschel, Chath. I. Exp. Feb 67 (NZAC)
- MC 43°14', 171°21' 1♀ Mt Algidus, 2000', 2-13 Dec 59, J I Townsend (NZAC)
- MC 43°45', 172°46' 1♀ Kennedy's Bush, Banks Peninsula, 30 Jan 62, J. Brown, in rotten wood associated with ant nest (NZAC)
- NZ 1♀ Holotype ♀, Sinodendron? Chatham. Westwood, 1863 (Hope Dept Oxford)

Holloceragnathus helotoides (Thomson) (2) (2)

- SL ^{41°22'}_{118°19'} ♀ West Plain, [nod.] (NZAC)
 SC ^{44°15'}_{171°17'} ♀ Temuka, ex telegraph pole [from] Australia, PQ S101, 28 May 69, C.J. Cuthbert (NZAC)
 GBX ♀ 10 miles N of Gisborne, under dry bark, dead Karaka [nod.] (NZAC)
 NN ^{41°16'}_{173°22'} ♀ Upper Maitai, 11 Nov 1928, E.S. Gourlay (NZAC)
 ? ♀ South Canterbury, 26 June 69, ex Australian hardwood ~~at~~ power pole, P.J.M., NZFRI, (NZAC) [used for SEM]
 MC ^{43°02'}_{171°35'} ♀ Bealy Valley, 9-11 Jan 57, E.S. Gourlay (NZAC)
 CH ♀ Taiko Camp, Chatham Is, 23 Dec '87, G. Messenger (NZAC)
 CH 2 ♀ Awakotara Tableland, stump of Hymenanthera chathamica, Chatham Is. Ex. Feb 1967, REARED, em. 18 June '68 (NZAC)
 CH ♀ Awakotara V[alley], in Myrsine coxii boles, Chatham I. Ex. Feb 67, REARED, em? (NZAC)
 CH 2 ♀ Awakotara Tableland, Dracophyllum arboreum, Ch. I. Ex. Feb 67, REARED, em? (NZAC)
 CH ♀ Pitti, Tupurangi bush, Coprosma chathamica, Ch. I. E.F. 67 (NZAC)
 CH ♀ Chatham Is., Dec 1987-Jan 1988, G. Messenger (NZAC)
 CH ♀ Awakotara, 23 Feb 67, beading bush, G. Kuschel, Ch. I. E.F. 67 (NZAC)
 MC ^{43°31'}_{172°37'} ♀ Christchurch, Apr 1926, A. Tonnoir (NZAC)
 - ♀ [no locality] 449, T. Brown Dup. Coll. (NZAC)
 - ♀ [no locality] 449, T. Brown Dup. Coll., Compared with HOLOTYPE of Sinodendron? areolatum Westwood [by] det. B.A. Holloway 1991 (NZAC)
 TO 3♂, 2♀ Tokaanu, Apr 1918, A.C. O'Connor (NMNZ) [Holloway, 1961]
 TO 3♂, 3♀ " 1918, A.C. O'Connor (NMNZ) [Holloway 1961]
 GB ^{38°39'}_{176°00'} ♀ Gisborne, Apr 1942, M. Laird (NMNZ) [Holloway '61]
 NN ^{41°07'}_{172°41'} ♂ Mt Arthur Tableland, 28 Dec 1889, G.V. Hudson (BMNH) [Holloway '61]
 WD ♀ Waiho Gorge, 15 Jan 1925, [coll?] (AMNZ) [Holloway '61]
 MC ^{43°17'}_{171°56'} ♀ Otaramanga, 7 Oct 1921, G. Arthey (CMNZ) [Holloway '61]
 MC 2♂ ^{43°102'}_{171°45'} ♀ Cass, June 1918, Lindsay (CMNZ) [Holloway '61]
 NC ^{43°07'}_{172°33'} ♂ Mt Grey, 25 Dec 1916, Lindsay (CMNZ) [Holloway '61]
 MC ♂ Otarama, 22 Oct 1921 [coll?] CMNZ [" "]
 MC ♀ Purple Peak, Akaroa, 25 Dec 1945, C.E. Clarke (AMNZ) [Holloway '61]
 MC 7♂, 5♀ Governors Bay, Christchurch [no date], Tapley (CMNZ) [Holloway '61]
 OL ♀ ^{44°51'}_{168°22'} Dart Valley, 5 Oct 1946, G. Gibbs (NMNZ) [Holloway '91]
 MC ^{43°36'}_{172°39'} ♀ Governors Bay, Christchurch, 13 Sept 1923, [C.] Lindsay (CMNZ) [Holloway '61]
 MC ♂ Christchurch, boring in electric pole, Apr 1926, A. Tonnoir (CMNZ) ["]
 DN 3♂, 1♀ → Mt Maungatua, Taiari, 24 Oct 1921 [coll?] (AMNZ) [Holloway '61] ^{45°53'}_{170°05'}
 ? 2♂, 3♀ Otago, 1946, Raymond Coll. (NMNZ) [Holloway '61]
 CH (Mang.) 2♂, 1♀ Mangere I, Chatham Is 4-21 Jan 1924, C. Lindsay (CMNZ) [Holloway '61]
 CH ♂ Chatham I, Wangamamiro, 27-28 Jan 1928, C. Lindsay (CMNZ) [Holloway '61]
 CH ♂ Kaingaroa, Chatham I., 25 Dec 1923, C. Lindsay (CMNZ) [Holloway '61]
 CH ♀ Chatham I, June 1931, G.H. Gubbins (NZAC) [not in NZAC] [Holloway '61]
 CH ♂ " " " " (AMNZ) [Holloway '61]
 CH ♂ " Jan 1911, A. Hamilton (NMNZ) ["]
 CH 2♂ " [nod.] (CMNZ) [Holloway '61]

Holloceratognathus helotoides (Thomson)

(3)

- CI 107 ♀ ^{176°13W, 44.17S} Pitt Is, Canister Cove, Scientific Res, 12 Jan 1990, C.A. Muir, in rotten wood
- CI 107 ♀ ^{176°30W} 43.52 Chatham Island, Henga Scenic Res, 23 Jan 1990, R.M. Emberson, under bark
- CI 176°10W 44.21 ♀ Rangitira, 28 Nov 1992, J.W.M. Marris, ex rotten log

Add Rangitira 1 to redescrⁿ ✓

OK.

3 174° 59' 41° 19'

Holloceratognathus passaliformis (Holloway)

- WN 1♂^{41° 19'} 174° 59' [Holotype] Jacobs Ladder, Orongorongo Valley, near Wellington, 25 Jan 1961, B.A. Holloway (NMNZ) In *Prolasius advena* nest
- WN 1♀ [Allotype] Same data except coll. R.G. Ordish (NMNZ)
- WN 1♂ 1♀ [Paratypes] Jacobs Ladder, Orongorongo Valley, in nest of *Prolasius advena* (Fr. Smith), 25 Jan 1961, D. Edwards, R.G. Ordish, B.A. Holloway (NZAC) Gift from NMNZ 1985.
- WN 3♀ [Paratypes] Jacobs Ladder, Orongorongo Valley, in nest of *Prolasius advena* (Fr. Smith), 25 Jan 1961, D. Edwards, R.G. Ordish, B.A. Holloway (NMNZ)
- WN 3♂, 3♀ [Paratypes] Jacobs Ladder, Orongorongo Valley in nest of *Prolasius advena* (Fr. Smith) 17 Jan 1961, D. Edwards + J. Balderson (NMNZ)
- WN 3♂ 1♀ Jacobs Ladder, Orongorongo Valley, in nest of *Prolasius advena* (Fr. Smith) 6 Feb 1978, R.G. Ordish (NZAC) Gift from NMNZ 1985. [Unfortunately the specimens were put in a tube containing carabids and suffered damage to their legs.]

Jacobs Ladder c. 100m above s.l.
 Additional records from Grehan (1980) :
 Wright St Bush, Wainuiomata c 6 km N of Jacobs Ladder, adjae. to urban area. "1974" n.o.d. + Oct '78 Coll. Grehan at 450m
 Butterfly Creek, Eastbourne Jan 1979, R.W. Hornabrook.
 Wright St Res. 41° 16' 174° 59' 450m
 Butterfly Ck 41° 18' 174° 55' near SL

① Mitophyllus alboquattatus Bates ①
Mitophyllus alboquattatus Bates 1867

- BR 1♂ ✓ Mt Murchison 4000', 14 Feb 1964, J I Townsend (NZAC) 41°44', 172°30'
- NR 1♂ ✓ Arthurs Pass, 8 Nov 1957, E S Gourlay (NZAC) 42°55', 171°34'
- MK 1♂ ✓ Mt Cook, 4 Jan 1929, A Philpott (NZAC) 43°36', 170°09'
- BR 1♂ ✓ Nelson, S end of Victoria Ra, 4820', 17 Jan 66, C.A. Fleming (NZAC) 42°15', 172°08'
- NN 1♂ ✓ Dun Mt, 2000', 28 ^{Nov} 1943, E S Gourlay (NZAC) 173°22', 41°21'
- GB 1♂ ^{37°55' 174°04'} ✓ Mt Hikurangi (4500', under bark of dead tree, 3 Jan 1958, J C Watt (NZAC)
- NC 2♂ ✓ Arthurs Pass, 3300', 7 Jan 1923, Myers (NZAC)
- NN 1♂ ✓ Saddle Hill 3000', 1 Feb 1938, A Richardson (NZAC) 41°16', 173°26'
- NN 1♂ ✓ Beeby's Knob, 4300', 7 Feb 1931, E S Gourlay (NZAC) 41°44', 172°56'
- OL 1♂ 1♀ Upper Rouburn River, 25 Jan 1926, C E Clarke (NZAC) 168°15', 44°44'
- NC 1♀ ✓ Arthurs Pass, 3000', 3 Jan 1923, Myers (NZAC)
- NN 1♀ ✓ Beeby's Knob, 4700', 2 Feb 1929, E S Gourlay (NZAC) 4144, 172 56
- TK 1♂ 1♀ ✓ Mt Egmont, 3000', early Jan 1923 G V Hudson (NMNZ) (ex Holloway 1961) 35°15', 174°02'
- WN 1♂ ✓ Mt Alpha, Tararua Ra, 3 Jan 1910, coll? (NMNZ) (ex Holloway 1961) 40°59', 175°17'
- 10♂ ? The Doubles, 1938, A. Richardson (BMNH) (ex Holloway 1961)
- NC 1♂ ✓ Arthurs Pass, Feb 1920, Lindsay (CMNZ) (ex Holloway 1961)
- NC 1♂ ✓ Arthurs Pass, Dec 1922, McLeay (BMNH) (ex Holloway 1961)
- MK 1♂ ^{43°45' 170°02'} ✓ Sealy Lake, Mt Cook, mid-Feb 1945, G W Gibbs (Hudson Collⁿ NMNZ) (ex Holloway '61)
- MC 1♂ ^{43°45' 172°51'} ✓ Port Hills, Banks Peninsula, 23 Dec 1942, A. Richardson (AMNZ) (ex Holloway 1961)
- OL 1♂ ✓ Type of cristatellus, Rouburn, 10 Feb 1914, T. Hall (BMNH) (ex Holloway 1961)
- OL 1♂ ^{44°44' 168°15'} ✓ Rouburn River Hut, 17 Jan 1926, coll? (AMNZ) (ex Holloway 1961)
- OL 4♂ 5♀ ✓ Upper Rouburn River, 25 Jan 1926, coll? (AMNZ) (ex Holloway 1961)
- OL 1♂ 1♀ ✓ " " 17 Jan 1926, ~~C E Clarke~~ coll? (BMNH) (ex Holloway 1961)
- OL 1♂ ✓ Kinloch, 28 Dec 1913, coll? (AMNZ) (ex Holloway 1961) 44°51', 168°21'
- OL 1♂ ✓ Queenstown 28 Dec 1947, C E Clarke (AMNZ) (ex Holloway 1961) 45°02', 168°37'

AK 1♂ ^{c. 36°52' 174°50'} Auckland, NZ, "undoubtedly Ceratogadellus alboquattatus Bates rather more thickly dotted with brown scales, the type being albed."
 From GB, TK, WN, NN, BR, NC, MC, MK, OL ex Museo Parry "MUSEUM PARIS 1952 COLL. ROBERTHUI"

Northern most record: Auckland (AK) latitude c. 36° 52'; southern most record Queenstown (OL) latitude 45° 02' S. From about 600m to about 1750 m.

Adults collected November to February under bark of dead tree.

Material examined Holotype ♂ of cristatellus + ~~28~~ ²⁹ new type ♂♂ + 12 n.t ♀♀ + 1♂ (Paristinus) compared to type of alboquattatus Bates by Parry

- BR 1♂ ✓ Lake Rotorua, 1 Jan 1920, J G Myers, T Cockcroft Collection (NMNZ) This very small specimen appears to have been denuded of all vestiture
- OL 1♀ ✓ Rouburn, Lake Wakatipu, Feb 1911 # 900a Hudson Collⁿ (NMNZ)
- OL 1♀ ✓ Humboldt Range, Lake Wakatipu, 3500', Jan 8, 1921, in beech forest near waterfall, # 900c Hudson Collⁿ (NMNZ) = Rouburn on map.
- NC 1♂ ✓ Punch Bowl, Arthurs Pass, Jan 1940, # 900d Hudson Collⁿ (NMNZ)

• Examined Apr 2000. Add to map ✓

These have been added to Luca's map. 2

Mitophyllus albuguttatus LUNZ material

- ✓ FD ⁴⁵⁴⁵16731 1 ♀ ✓ Fiordland NP, S Borland Biv., 730m, 2 Nov 1982, C.A. Muir, moss at night
In Nothofagus forest. (LUNZ)
- ✓ RA ¹⁴²³¹1074831 1 ♀ ✓ Oaro, 15 Mar 1981, O. McHugh (LUNZ)
- ✓ MC ⁴³⁰⁶17152 1 ♀ ✓ Craigieburn, 4000'-4500', 11-Feb-1971, R.M. Emberson. (= 1200-1400m) (LUNZ)
- ✓ OL ⁴⁴⁰³³16822 1 ♀ ✓ Mt Aspiring NP, Glacier Burn, 450m, 30 Jan 1987, D.W. Munkel, sweeping (LUNZ)
- ✓ MC ⁴³⁰²17145 1 ♀ ✓ Cass, MC, 770m, 24 Mar 1984, J.W.M. Marris, under bark of dead Nothofagus sp. tree (LUNZ)
- ✓ MC ⁴²⁵⁷17134 1 ♀ ✓ Arthur's Pass, Klondyke Corner, 10 Mar 1985, R.M. Emberson, under log in Nothofagus forest. (LUNZ)

~~Correct~~ Southernmost record: S. Borland Bivouac, 730m, Fiordland N.P. ✓

OK.

② Mitophyllus angusticeps Brown ①
Mitophyllus angusticeps Brown

The Type of angusticeps is from Wellington. I have not examined it.

- BR ✓ 3♂ 4♀ Head L. Roloff, Nelson, 11 Oct 1964, A K Walker, ex rotten log, Travers R. (NZAC) 41°52', 172°49'
- WD ✓ 10♂ 1♀ Hokitika Island, Westland, 14 Nov 1968, J I Townsend (NZAC) 42°43', 170°58'
- WD ✓ 10♂ Waiho, Westland, Nov 1946, MW Carter (NZAC) 43°17', 170°03'
- OL ✓ 10♂ 3♀ Dart Valley, Kinloch, Lake Wakatipu, 4 Jan 1921, Hudson ~~under~~ logs [#1145a-d H.C.] ident by Hudson as angusticeps (NMNZ) 44°47', 168°20'
- OL ✓ 1♀ Kinloch, 4 Jan 1921, G V Hudson (NMNZ) 44°51', 168°21'
- BR ✓ 1♀ Howard, 31 Oct 1915, #2801 [all labels brownish/w] (NZAC) 41°46', 172°40'
- BR ✓ 1♀ " , G-F, (NZAC) 172°40'
- MC ✓ 10♂ TYPE of mandibularis Point Hill, ~~19~~ Decr 1914, #2847
 [in descripⁿ but not on label "Point Hill, west of Mount Algidus. One found by Mr T. Hall at a height of 3,500 feet in December, 1913"]
 43°14', 171°21'
- [WN 10♂ TYPE of angusticeps Wellington, #2801 - Location of type unknown] 41°17', 174°46'
 ↗ not examined

Specimens examined. Holotype ♂ of mandibularis and 18 non-type specimens (7 males, 11 females) (BMNH, NMNZ, NZAC).

WN, BR, WD, MC, OL. Northernmost record Wellington (WN) latitude 41°17'S; southernmost record Kinloch (OL) latitude 44°51'S.

From near sea level to about 1067 m. Adults have been collected from October to January in and under rotten logs.

- Examined again April 2000.

✓ 41°34' 173°32' ✓ Mitophyllus angusticeps LUNZ

MB ✓ 107 ✓ Wairau River Valley, 800m, 22 Dec 1981, J.W. Early, under log on grassy river flat

4328
17001 WD 4328 ✓ Fox Glacier, 10 Nov 1973, D. Penman, under wood on moraine

MC 4321 ✓ 17128 ♀ Wilberforce R., 29 Nov 1977, K. Jesson, under stones



OK.

NZAC $\textcircled{34}$ + 2 MONZ, + ? AMNZ. Mitophyllus arcuatus Holloway $\textcircled{1}$
Mitophyllus arcuatus n-sp All recorded specimens are part of Type series.

- ~~AK~~ $\textcircled{10^7}$ $\textcircled{34}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}07'N}$ $\textcircled{175^{\circ}23'W}$ Great Barrier Island, Motairehe, Katherine Bay, 20 Apr 1966, S. Leask (~~AMNZ~~) (MONZ)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}53'N}$ $\textcircled{174^{\circ}43'W}$ Gt Barrier Island, Motairehe, Katherine Bay, April 1966 S. Leask (~~AMNZ~~) (MONZ)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}53'N}$ $\textcircled{174^{\circ}43'W}$ Mt Albert, 22 Mar 1985, D. Allen, light trap at MARC [specimen has hypopi on head, pronotum, leg] (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}50'N}$ $\textcircled{174^{\circ}26'W}$ Muriwai, 4 Mar 1996 E.H. Kuschel (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}50'N}$ $\textcircled{174^{\circ}26'W}$ Muriwai, 7 Mar 1997, E.H. Kuschel (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}56'N}$ $\textcircled{174^{\circ}43'W}$ Lynfield, 25 Mar 1995, G. Kuschel, in dead branch of Ficus macrophylla (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}56'N}$ $\textcircled{174^{\circ}43'W}$ Lynfield, 9 Mar 1997, B.A. Holloway (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}56'N}$ $\textcircled{174^{\circ}43'W}$ Auckland, 7 Jan 1941, Lin] power pole, K. Harrow (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{37^{\circ}21'N}$ $\textcircled{175^{\circ}22'W}$ Hapua Kohe Ra, 3 km SW of Kaihara, 29 Jan 1984, ex rotten ? Knightia log, J.C. Watt (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}52'N}$ $\textcircled{174^{\circ}50'W}$ Purewa Bush, 21 Mar 1942, D.W. McKenzie (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}53'N}$ $\textcircled{174^{\circ}38'W}$ Laingholm, 3 Mar 1980, in light trap, R. Kleinpaste (NZAC)
- ~~AK~~ $\textcircled{20^7}$ $\textcircled{10^7}$ $\textcircled{37^{\circ}16'N}$ $\textcircled{175^{\circ}08'W}$ ^{Waipuna} Reserve, Waitomo, 28 Oct ~~1977~~ 1977, ex damp rotten wood on ground, reared W77/21, em 9 Dec 77, BM May (NZAC)
- ~~AK~~ $\textcircled{30^7}$ $\textcircled{10^7}$ $\textcircled{35^{\circ}17'N}$ $\textcircled{174^{\circ}05'W}$ Paikia, 14 Mar 1974, at light, R.A. Cumber (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{38^{\circ}01'N}$ $\textcircled{176^{\circ}22'W}$ Otaramarae, L. Rotoiti, 29 Dec 1977, ^{in dead cherry trunk} S. Dugdale (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{38^{\circ}16'N}$ $\textcircled{175^{\circ}08'W}$ ^{una} Reserve, Waitomo, 28 Oct 1977, ex damp rotten wood on ground, reared W77/21, em 16 Dec 77, B.H. May (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{37^{\circ}01'N}$ $\textcircled{174^{\circ}33'W}$ Huia, 24 Sep 1976, old dead stump Leptospermum, reared W76/17, em 18 Mar 1977, BM May (NZAC)
- ~~AK~~ $\textcircled{20^7}$ $\textcircled{10^7}$ $\textcircled{37^{\circ}01'N}$ $\textcircled{174^{\circ}33'W}$ Huia same data as preceding except em 1 Feb 1977 (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{35^{\circ}06'N}$ $\textcircled{173^{\circ}12'W}$ Aupori Peninsula, near Paparore, 26 Dec 1985, reared, Ulex europaeus, em 27 Feb 1986, C.J. Green (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}57'N}$ $\textcircled{174^{\circ}39'W}$ Titirangi, 19 Apr 1976, G.W. Ramsay (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{38^{\circ}01'N}$ $\textcircled{176^{\circ}22'W}$ Otaramarae, L. Rotoiti, 26 Dec 1977-3 Jan 78, to house J. Dugdale (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{38^{\circ}01'N}$ $\textcircled{176^{\circ}22'W}$ " " 29 Dec 1977, ex dead logs in secondary growth bush, J.S. Dugdale (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{37^{\circ}01'N}$ $\textcircled{174^{\circ}33'W}$ Mt Albert, MARC, 28 Feb 1980, in light trap, N.A. Martin (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{37^{\circ}01'N}$ $\textcircled{174^{\circ}33'W}$ Mt Albert, 2 Apr 1980, light trap, N.A. Martin (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}49'N}$ $\textcircled{174^{\circ}44'W}$ North Shore, AK, Chelsea Sugar Refinery, 7 Nov 1979, larva in well rotted branch on standing oak, em Jan 1980, assoc larva + pupae in alcohol, J.F. Longworth (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}54'N}$ $\textcircled{174^{\circ}52'W}$ East Tamaki, Jan-Feb 1980, H.M. Rauden (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}54'N}$ $\textcircled{174^{\circ}52'W}$ Laingholm, 19 Mar 1980, R.H. Kleinpaste (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}51'N}$ $\textcircled{174^{\circ}39'W}$ Te Atatu, 11 Mar 1978, B. Eykel (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}13'N}$ $\textcircled{175^{\circ}04'W}$ Little Barrier I., Te Maraerou, 7-10 Mar 1974, at light, J.C. Watt (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}56'N}$ $\textcircled{174^{\circ}40'W}$ Lynfield W(cattle) Bay, 5 Jan 1979, G. Kuschel (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}56'N}$ $\textcircled{174^{\circ}40'W}$ Glen Eden, 2 Jan 1992, R.C. Henderson, on flowers Kunzea ericoides, in garden near bush, (NZAC)
- ~~AK~~ $\textcircled{10^7}$ $\textcircled{10^7}$ $\textcircled{36^{\circ}56'N}$ $\textcircled{174^{\circ}40'W}$ Lynfield, Tropicana Drive, 6 Jan 1977, G. Kuschel (NZAC)

320⁷ 8♀ = (2 MONZ) + (30 NZAC) 8♀

Mitophyllus arcuatus
Holloway

Mitophyllus arcuatus n. sp. (2)

- ✓ ✓ ~~AK~~ (10♂) ^{36°42' 174°58'} Noises Is, Motuhoropapa I., Malaise trap (1) 19-20 Feb '78, JS Dugdale (NZAC)
- ✓ ✓ ~~AK~~ (10♂) " " " SW slope, 11-17 Jan 1978, malaise trap near pit trap 23, LL Deitz (NZAC)
- ~~AK~~ (10♂) ^{36°47' 174°39'} Titirangi, 5 Mar 1978, G.W. Ramsay, photogr. MARC 6 Mar 78, use for SEM (setiferous patch on right front leg has been abraded) (NZAC)
- ✓ ~~BP~~ (10♂) ^{37°58' 174°59'} Whakatane, 14 Dec 1954, ex post, Mrs P. i. Cristall (NZAC)
- ✓ ~~AK~~ (10♂) ^{36°44' 174°38'} Riverhead Forest, Jan '55, to light trap, JS Edwards (NZAC)
- ✓ ~~AK~~ (10♂) ^{36°15' 174°44'} Pakiri Beach, N Auckland, under Spinifex, 1 Apr 1961, J.C. Watt (NZAC)
- ✓ ~~AK~~ (10♂) ^{36°48' 174°51'} Rangitoto I, ex rotten branch, 10 Mar 1957, J.C. Watt, J.C. Watt Coll¹² (NZAC)
- ✓ ~~AK~~ (10♂) ^{36°48' 175°05'} Waiheke I., 23 Dec 1942, G. Chamberlain (NZAC)
- ✓ ~~AK~~ (30♂) Auckland, 23 Feb 1940, E.S. Gourlay (NZAC)
- ✓ ~~AK~~ (20♂) (20♀) Auckland, power pole, 7 Jan 1941, K. Harrow (NZAC)
- ✓ ~~AK~~ (10♂) ^{36°44' 174°44'} Auckland, Owhiraka, 13 May 1939, off coat, Mr Cornford (NZAC)
- ✓ ~~AK~~ (10♂) (10♀) Takapuna, Jan 1940, K. Harrow (NZAC) 36°48', 174°48'
- ✓ ~~AK~~ (20♂) Purewa Bush, 20 Feb 1943, D. McKenzie (NZAC)
- ~~AK~~ (40♂) ^{36°57' 174°39'} Titirangi, Apr 1953, C.R. Thomas (NZAC) ex light trap
- ~~ND~~ (20♂) ^{35°29' 173°29'} Hokianga Stn, Whirinaki Valley, Jan 1957, Miss W Davidson (NZAC)
- ✓ ~~AK~~ (10♂) Waiheke I., Jan 1944, G. Chamberlain (NZAC)
- ✓ ~~AK~~ (10♂) ^{36°55' 174°45'} Mt Roskill, Auckland, 28 Mar 1947, A.E. Brookes, AEB Coll¹² (NZAC)
- ✓ ~~AK~~ (10♂) ^{36°54' 174°43'} Mt Albert, " Mar 1915, "4450" A.E. Brookes Coll¹² (NZAC)
- ✓ ~~AK~~ (10♂) Titirangi, 30 Jan 1953, ex light trap, C.R. Thomas (NZAC)
- ~~AK~~ (10♂) (10♀) Mt Albert, Mar 1946, F. Atkinson (NZAC)
- ✓ ~~AK~~ (10♂) (20♀) Orua Bay, 5 Apr 1942, J.M. Kelsey (NZAC) 37°04', 174°36'
- ✓ ~~AK~~ (10♂) ^{36°53' 174°48'} Mangere, 26 Mar 1951, K.P. Lamb (NZAC)
- ✓ ~~AK~~ (10♂) Titirangi, ex light trap, 1953, C.R. Thomas (NZAC)
- ✓ ~~AK~~ (10♂) " " " 25 Feb 1953, C.R. Thomas (NZAC)
- ~~ND~~ (10♂) ^{37°47' 175°50'} Okauia, 19 Dec 1920 "445" A.E. Brookes Coll¹² (NZAC)
- ~~AK~~ (10♂) ^{37°08' 175°34'} Thames, 8 Apr 1954, JS Armstrong, JS Armstrong Coll¹² (NZAC)
- ~~AK~~ (10♂) ^{36°52' 174°47'} Grafton, ~~Stk~~ Gully, Auck, 20 Jan 1951, D. Spiller (NZAC)
- ~~ND~~ (10♂) Paikia, 30 Mar 1975, attracted to light, R.A. Cumber (NZAC)
- ~~AK~~ (20♂) (30♀) Mill Bay near Cornwallis, in tunnels, Eucalyptus log, 13 Mar 1960, K.A.J. Wise (NZAC)
- ~~ND~~ (10♂) ^{35°35' 173°50'} Twin Bridges, near Awarua, 16 Jan 1951, D. Spiller (NZAC) ~~NOT A PARATYPE~~
- ~~AK~~ (10♂) ^{37°53' 175°10'} Karamu, Te Awamutu, intent, 20 Apr 1957, B.M. May (NZAC)
- ~~AK~~ (10♂) Titirangi, 14 Nov 1954, ex light trap, collector ^{J.S. Edwards} J.C. Watt Coll¹² (NZAC)
- ~~AK~~ (1♂) Holotype Lynfield, 12 Apr 50, G. Kusche (NZAC) **HOLOTYPE**
- ~~AK~~ (10♂) " Tropicana Dr, 3 Apr 1976, G. Kusche (NZAC)
- ~~AK~~ (10♂) Mt Albert, 27 Mar 1982, P. Herbert (NZAC)
- ~~AK~~ (10♂) Lynfield, 28 Feb 1980, G. Kusche (NZAC) reared Weinmannia
- ~~AK~~ (10♂) " 3 Apr 1980 " " (NZAC) malaise trap
- ~~AK~~ (10♂) " 2 Feb 1980 " " Corynocarpus laevigatus (NZAC)
- ~~AK~~ (10♀) ^{36°54' 174°32'} Waitakere Ra, Cascades, Kauri Park, 14 Oct 1976, J.C. Watt, reared rotten wet branch (unidentified), W76/18, em 18 Feb 1977 (NZAC)
- ~~AK~~ (10♀) Waipuna Reserve, Waitomo, 28 Oct 1977, ex damp rotten wood on ground, reared, W77/21, em 6 Jan '78, B.M. May (NZAC)
- ~~AK~~ (10♀) ^{37°13' 175°13'} Mangatangi, Hunua Ra, 9 Mar-5 Apr 1977, ARA Kauri Seed trap 12, I. Barton (NZAC)
- 42♀ 12♀ 45+ Holotype + 1 non-paratype

check specimen *Mitophyllus arcuatus* ~~Mitophyllus~~ ~~arcuatus~~ (3)

- ✓ ~~AK~~ 38° 01' 176° 22' (10) Mangatangi, Hunua Ra, 9 Apr 1976, ARA, ex Kauri seed trap 3 (NZAC)
- ✓ ~~AK~~ 35° 14' 173° 36' (10) Otaramarae, L. Roboiti, 29 Dec 1977, in dead cherry trunk, JS Dugdale (NZAC)
- ✓ ~~ND~~ (10) Omahuta, SF, Kauri Sanctuary, 4 Feb 1975, ex rotten wood 75/21, G. Kuschel (NZAC)
- ~~ND~~ (10) Paparore, in privately owned regenerating bush, 26 Oct 1985, cut out of dead *Ulex* (gorse) stem, C.J. Green (NZAC)
- ✓ ~~AK~~ 36° 59' 174° 53' (10) Papatoetoe, 27 June 1954, JC Watt (NZAC) [JCW Collⁿ]
- ✓ ~~AK~~ 36° 53' 174° 48' (10) Remuera, attracted to light, 25 Mar 1957, J Robb [JCW Collⁿ] (NZAC)
- ✓ ~~AK~~ (10) Tihirangi, 2 Apr 1991, at light, PA Maddison (NZAC)
- ✓ ~~AK~~ (10) Noises Is, Motuhoropapa I., 17 Jan - 16 Feb 1978, pit trap 16, L.L. Dultz + JS Dugdale (NZAC)
- ✓ ~~AK~~ (10) Lynfield, 22 Mar 1981, Malaise trap 4, G. Kuschel (NZAC)
- ✓ ~~AK~~ 37° 49' 175° 46' (10) Makamaka, Kaimai Ra, Jan 1932, A.E. Brookes, A.E.B.C.ⁿ (NZAC)
- ✓ ~~AK~~ (10) Owairaka, Auckland, 10 Mar 1943, D. McKenzie (NZAC)
- ✓ ~~AK~~ (10) Mt Albert, MARC, 24 Mar 1980, in light trap, N.A. Martin (NZAC)
- ✓ ~~AK~~ (10) Lynfield, 4 Feb 1978, G. Kuschel (NZAC)
- ~~AK~~ (10) " 4 May 1980, malaise trap, G. Kuschel (NZAC)
- ~~AK~~ (10) " Tropicana Dr. 25 Jan 1975, G. Kuschel (NZAC)
- ✓ ~~AK~~ (10) Noises Is, Motuhoropapa I., 17 Feb 1978, Malaise trap 2, JS Dugdale (NZAC)
- ✓ ~~AK~~ (10) Mt Albert, inside MARC, 20 Feb 1989, P.A. Maddison (NZAC)
- ✓ ~~AK~~ 36° 59' 174° 38' (10) Laingholm, 11 Mar 1980, R.H. Kleinpaste (NZAC)
- ✓ ~~ND~~ 35° 43' 174° 18' (10) Whangarei, 5 Apr 1926, E. Fairburn, A.E. Brookes Collⁿ (NZAC)
- ~~AK~~ (20) Great Barrier, Arid I., 17 Jan 1944, Major Buddle (NZAC) 36° 14' 175° 19'
- ✓ ~~AK~~ (10) Tihirangi, 10 Apr 1942, bred ex timber, em Mar 1943, MW Carter (NZAC)
- ~~AK~~ (10) Okauia, 13 Feb 1920, A.E. Brookes Collⁿ (no collector given) (NZAC)
- ~~AK~~ (10) " 5 Mar 1921 " " " " (NZAC)
- ~~AK~~ (20) Auckland, "iron bark", Feb 1924, coll? (NZAC)
- ✓ ~~AK~~ (10) Laingholm, 19 Mar 1980, R.H. Kleinpaste (NZAC)
- ✓ ~~AK~~ (10) Tihirangi, 13 Mar 1979, to light, P.A. Maddison (NZAC)
- ~~AK~~ (10) Lynfield, 28 Jan 1980, G. Kuschel (NZAC)
- ~~AK~~ (10) Waitakere Ra., Kauri Knoll, 23 Jan 1979, JS Dugdale (NZAC)

More paratypes on p. 4

⊗ = Mahuki I. in Broken Is. Group = 36° 14', 175° 18.5' = 36° 14', 175° 19'

Specimens examined here: 84 ♂♂, 48 ♀♀ (NZAC, NMNZ)

Localities: ND, AK, CL (incl. Little Barrier + Great Barrier Is.), WO, BP, L.

Northernmost: Aupouri Peninsula, near Paparore (ND) 35° 00', 173° 12'

Southernmost: Waipuna Reserve, Waikato WO 38° 16' 175° 08'

From sea to about 300m. in dead stems *Ulex europaeus*,

Adults collected January - June, Oct, Dec. in dead rotten wood + dead branches of *Corynocarpus laevis*, cherry tree trunk, *Ficus macrophylla*, in tunnels in *Eucalyptus*, in power pole, in fence post, under *Sphirex* on a beach, in gill trap, on flowers of *Kunzea ericoides*, in Malaise trap, in light trap, at lights, inside houses.

Larvae found in damp rotten wood, old stump of *Leptospermum*, dead stems *Ulex europaeus*, well rotted branch of standing oak, rotten branch *Weinmannia*, rotten branch *Corynocarpus laevis*.

Sep-Dec. + adults emerged in laboratory 2-6 months later.

Remarks See literature. *M. arcuatus* in northern 1/2 of N. Island only. Very common in most of the island.

Mitophyllus arcuatus (3) M. arcuatus (4)

Additional records - ^{Holloway} since August 1998.

AK (2 ♂) (3 ♀) Wattle Bay, Lynfield, 20 Mar 1999, in rotten wood of Meliccythus ramiflorus, G. Kuschel (NZAC) [an additional ♂ + ♀ from same batch sent to Norio Okada, 24 Mar 1999] ^{on computer}
These have been incorporated in descripⁿ, etc.

AK (10 ♂) ^{on computer} Lynfield, 30 Mar 99, in porch, BA Holloway. (incorp. in descripⁿ)

Females 51 NZAC + 7 AMNZ

Males 83 NZAC + 2 MONZ +

Further host plant data, etc. In rotten wood of Meliccythus ramiflorus (mahoe)

(4)

Mitophyllus dispar (Sharp)

Mitophyllus dispar (Sharp)

- WN ✓ 1 ♀ Tokomaru Gorge, 23 Nov 1959, Rm Bull (NZAC) 40°33', 175°30'
- BR ✓ 1 ♂ - Fragments of specimen (attacked by *Anthrenus* larva mounted on card) Greymouth, New Zealand, Helms, Sharp Coll. 1905-313 *Ceratognathus dispar* Sharp co-type. [in Sharp's handwriting] AE Brookes Collⁿ (NZAC) ^{42°27', 171°12'}
- TK ✓ 2 ♂, 1 ♀ Meremere Forest, Stw Taranaki, ex dead Kamahi, 30 Oct 1973. KJ Fox [1 ♂ has damaged left elytron] (NZAC) 39°34', 174°26'
- BR ✓ 1 ♂ ^{41°46', 172°40'} Howard, 31 Oct 1915, #2812 [all labels in Brown's handwriting] (NZAC)
- BR ✓ 1 ♂ Howard, G.F., 31 Oct 1915, #2812 var. 1969? [all labels in Brown's h/writing] (NZAC)
- ~~1 ♀ Howard, 31 Oct 1915 #2801 [all labels Brown's h/writing] (NZAC)~~
- ~~1 ♀ Howard, G.F., 31 Oct 1915 #2801 [all labels Brown's h/writing] (NZAC)~~
- SL ✓ 1 ♂ Tuatapere, no date, J.H Lewis (NMNZ) 46°08' 167°41'
- BR ✓ 1 ♂ TYPE of dispar, Greymouth, 1881, Helms (BMNH)
- OL ✓ ^{44°51', 168°21'} 1 ♀ Kintloch, Lake Wakatipu, Dec 31, 1920 [#1151a, Hudson Collⁿ] Coll. Hudson [labelled M. dispar in Hudson's handwriting] (NMNZ)
- TK ✓ 1 ♂ ^{39°18', 174°04'} Mt Egmont, 3000', early Jan. 1923, Hudson [#1151b H.C.] identified by Hudson as M. dispar. (NMNZ)
- TO ✓ 1 ♂ ^{38°57', 175°51'} Waimarino, Jan 6, 1930, Hudson [#1151c H.C.] id by Hudson as M. dispar (NMNZ)
- WD ✓ ^{42°50', 171°34'} 1 ♀ Otira, no date, Lewis Collⁿ (NMNZ)
- BR ✓ 1 ♂ ^{41°45', 171°36'} TYPE of comognathus, Westport, ~~no date~~ ¹⁹⁰² [J. J. Walker, in descripⁿ but not on label accomp type] #2812 (BMNH)

(males)

Specimens examined: Holotypes of dispar Sharp and comognathus Brown and 12 non type specimens (8 males, 4 females) (BMNH, NMNZ, NZAC)

TO, TK, WN, BR, WD, OL, SL. Northernmost record: Waimarino

(TO) latitude 38°57'S; southernmost record: Tuatapere (SL) latitude 46°08'S.

From near sea level to about 1000 m. Adults have been collected from

October to January in rotten logs including those of Weinmannia racemosa

(Kamahi)

- Examined again April 2000

MC ✓ 107
42°57'
171°34'

Mitophyllus dispar LUNZ

Arthur's Pass Nat. Pk, MC, Mt Philistine, 1750m, 28 Dec 1987, RMEmberson & P. Syrett
on snow (LUNZ)

✓
OK.

(5) Mitophyllus falcatus Holloway ^{has been plotted. (1)}
Mitophyllus falcatus n.sp. ^{Whangarei, Nelson} Lynfield/Manukau:

✓ AK	1 ♂	Lynfield, 10 Aug 1980, malaise trap 4, G. Kuschel (NZAC)	36°57', 174°43'	✓
✓ "	1 ♂	" 13 Apr 1975, litter 75/74, G. Kuschel (NZAC)	"	✓
✓ "	1 ♂	" 21 Jun 1975, G. Kuschel (NZAC)	"	✓
✓ "	2 ♂	" 4 May 1975, litter 75/103, G. Kuschel (NZAC)	"	✓
✓ "	1 ♂	" 3 Aug 1980, malaise trap site 4, G. Kuschel (NZAC)	"	✓
✓ "	1 ♂	Huia 24 Sep 1976, old dead stump <u>Leptospermum</u> , BM May ^{37°00'} 21 July ¹⁹⁷⁷ (NZAC)	174°33'	✓
✓ ND	1 ♂ ^{35°49'} ^{174°31'}	Mt Manaia, Whangarei, 14 Mar 1970, in dead wood, BM May (NZAC)	"	✓
✓ AK	1 ♀	Lynfield, Tropicana Drive, 23 Nov 74, G. Kuschel (NZAC)	"	✓
✓ "	1 ♀	Wattle Bay, 20 Sep 1981, ex rotten wood, C. F. Butcher (NZAC)	"	✓
✓ ND	1 ♀	Spirits Bay, Nov 1967, J. L. Townsend (NZAC)	34°26', 172°50'	✓
✓ NN	1 ♀	Nelson, DSIR, 19 Aug 1966, J. C. Watt (NZAC)	41°16', 173°16'	✓
✓ AK	1 ♀	Lynfield, 9 Nov 1980, malaise trap 5, G. Kuschel (NZAC)	"	✓
✓ "	1 ♀	" 3 Aug 1980, malaise trap site 5, G. Kuschel (NZAC)	"	✓
✓ "	1 ♀	Orua Bay 10 Apr 1944, D. Spiller (NZAC)	37°03', 174°36'	✓

Recorded from ND, AK, NN.

Sea level - c. 400 m.

Adults have been collected from April to November. Larva coll Sep 76, adult emerged July 77.

Northernmost locality: Spirits Bay, ND. 34°26', 172°50'

Southernmost: Nelson (DSIR) 41°16', 173°16'

Adults collected in litter, malaise traps, old dead stump of Leptospermum and rotten wood.

Larva collected Sept 76, ^{then} adult emerged July 77.

Eymology: The specific epithet ~~is~~ ^{the} Latin word for sickle and alludes to the sickle-shaped mandibles of males.

(6)

Mitophyllus foveolatus (Brown)
Mitophyllus foveolatus (Brown)

- ✓ BR 41° 59' / 171° 53' 1 ♂ Fletchers Creek, nr Reefton, 9 Nov 1971, J.S. Dugdale (NZAC)
- ✓ NN 41° 11' / 172° 41' 2 ♂ Gardens Knob, ^{11501 m} 27 Dec 1958, R.M. Bull (NZAC)
- WD 44° 15' / 168° 32' 1 ♂ Summit, Tempest Spur, W Olivine Ra. 1524 m 30 Jan 75, G.W. Ramsay (NZAC)
- ✓ NN 41° 06' / 172° 35' 1 ♂ Cobb Valley, 18 Apr '66, J. Mc Burney, ex ^(Hawhairauinaki) *Nothofagus cliffortioides*, (NZAC)
- ✓ NN 41° 10' / 172° 36' 1 ♂ Ballroom Hut, 4300', 8 Jan 1930, E.S. Gourlay (NZAC)
- NN ✓ 1 ♂ Gardens Knob, 4000', Nelson, J.I. Townsend ~~(NZAC)~~ 27 Dec 1958 (NZAC)
- ✓ NN 41° 15' / 172° 34' 1 ♂ Baton Saddle, Nelson 23 Dec 1961 J.I. Townsend (NZAC)
- ✓ NN 41° 18' / 173° 22' 1 ♂ Upper Maitai, 12 Feb 1939, E.S. Gourlay (NZAC)
- ✓ NN 1 ♀ 1 ♂ Mt Arthur, ^{11795 m} Lewis Collⁿ No. 193e no other data (NZAC) 41° 13', 172° 41'
- ✓ OL 1 ♀ 44° 15' / 169° 13' Makarora, 21-24 Jan 1978, malaise trap, S.J. Peck. (NZAC)
- ✓ BR 1 ♀ 42° 04' / 172° 55' Coldwater Creek, Upper Wairau, Nel, 3 Feb 1971, J.I. Townsend (NZAC)
- ✓ OL 1 ♀ 44° 38' / 168° 22' Mt Earnslaw, ^(2815 m) 9 Jan 1945, E.S. Gourlay (NZAC)
- ✓ NN 2 ♀ 41° 32' / 173° 05' Wairoa Gorge 9 Apr 1950, J.L. Gourlay (NZAC)
- NN 1 ♀ No data (NZAC)
- ✓ NN ✓ 1 ♂ Mt Arthur, no date, G.V. Hudson (BMNH)
- ✓ NN ✓ 1 ♂ " " no other data (BMNH)
- ✓ NN 1 ♀ 1 ♂ Mt Arthur Tableland (3600') Jan 1891, G.V. Hudson (NMNZ) 41° 13', 172° 39'
- ✓ NN 1 ♀ 41° 12' / 172° 45' Flora Saddle, Mt Arthur, 13 Jan 1918 ~~NMNZ~~ coll? (NMNZ)
- ✓ - ✓ 1 ♂ Nelson, no other data (NZAC) ? TYPE
- ✓ - ✓ 2 ♂ Nelson (3000') 1850, G.V. Hudson (BMNH)
- BR 42° 03' / 171° 54' 1 ♂ Boatmans, no other data (BMNH)
- ✓ WD 1 ♀ 42° 54' / 170° 48' Ross, no other data (NMNZ)
- ✓ MC 1 ♀ 43° 38' / 172° 39' Governors Bush, ^{? = Bay} Christchurch, no date, Sharp Collⁿ (BMNH)
- ✓ OL 2 ♀ ✓ Upper Routeburn River, 21 Jan 1925, C.E. Clarke (AMNZ)
- ✓ OL 1 ♀ ✓ Routeburn River, at hut, 8 Jan 1945 C.E. Clarke (BMNH) 44° 44' / 168° 13'
- ✓ OL ✓ 1 ♂ " " " 7 Jan 1945 " " " (BMNH)
- ✓ ED 1 ♀ 45° 29' / 167° 35' Flat Top Mt (3500') nr L. Manapouri, 1 Jan 1929, C.E. Clarke (AMNZ)
- FD 1 ♀ 45° 40' / 167° 25' Hunter Mts, Jan 1915, coll? (BMNH)

Adults have been collected Nov - April; NN, BR, WD, MC, OL, FD from ^{near} SL to c 1500m
 Northernmost record Cobb Valley NN 41° 06'; southernmost Hunter Mts, FD 45° 40'.
 On ^(Hawhairauinaki) *Nothofagus cliffortioides*, malaise trap. Hudson (1934) suggests that it is
 attached to ~~alpine~~ ^{mountain} beeches. Acc. to Hudson (1934) this sp is "probably attached
 to alpine beeches"

(7)

Mitophyllus fuscus (Brown)

(1)

Mitophyllus fuscus (Brown)

[Descriptⁿ of ♀ by Brown, based on 2 ♀♀ from Taiari, coll. on Kowhai log by Fulton] ^{46°04'}
_{170°11'}

DN 1 ♀ Taiari, on a Kowhai log, Sydney W. Fulton (BMNH) LECTOTYPE

DN 1 ♀ Moeraki, no other data (NZAC) 45°21' 170°49'

SL 10 ♀ Catlins State Forest, ~~Sty~~ Hunkers Hills, 550 m, 8 Nov 1982,
4627 (SL) R.M. Emberson, under bark of Nathofagus (LUNZ) ✓

(8)

Mitophyllus gibbosus (Brown)
Mitophyllus gibbosus (Brown 1885) #1666

- AKX 10[♂] ^{36°52'}_{175°03'} Type of M. tuberculatus Clevedon, no date, G. Munroe (BMNH)
- NDX ^{35°46'}_{174°27'} 10 ♀ Type of C. gibbosus ^{EBay}Parua, Whangarei Harbour, no date, ^{Mr}Crisp (BMNH)
- NDX 10[♂] ^{35°17'}_{174°09'} Paihia, 15 Jan 1967 RA Cumber (NZAC)
- GBX 10[♂] ^{37°39'}_{178°24'} Kakanui, 300m, ^{malaise trap in}Nothofagus forest, Dec-1 Feb 1993, JSDugdale (NZAC)
- TKX 10[♂] ^{39°04'}_{174°04'} New Plymouth, 24 Mar 1953, FH Mansell ~~(MONZ)~~ (MONZ)
- WNX 10[♂] ^{41°07'}_{175°04'} Upper Hutt, Wellington, 9 Feb 1913, ACC'Connor (MONZ) To be returned
- WNX ^{41°07'}_{174°44'} 10x Karori, Wellington 1884, GV Hudson (MONZ)
- WNX ^{41°05'}_{175°12'} 10 ♀ Pakuratahi, Kaitoke, beaten ~~from~~ out of ribbon bark [Hoheria] 28 Dec 1901, GV Hudson Coll (MONZ) [#164c]
- WNX 2.0[♂] ^{41°05'}_{175°11'} Kaitoke, [WN] beaten out of dead shrubs, in hot afternoon sun, 16 Dec 1919, GV Hudson Coll (MONZ) [#164d, #164e]
- WNX ^{41°16'}_{174°54'} 10 ♀ Days Bay, beaten out of dead tree, 19 Jan 1926, GV Hudson Coll (MONZ) [#164f]
- WNX 10[♂] ^{41°13'}_{174°05'} Korokoro, flying in hot sunshine 2 Mar 1926, GV Hudson Coll (MONZ) [#164g]
- WNX 10[♂] ✓ Days Bay, beaten out of dead tree, 16 Feb 1931, GV Hudson Coll (MONZ) [#164h]
- WNX 10[♂] ^{41°16'}_{174°42'} Makara Hill, Karori, 9 Feb 1884, GV Hudson (BMNH)

ND, AK, GB, TK, WN.

Northernmost locality: Paihia (ND) 35°17'S; southernmost locality: Karori (WN) 41°17'S.

Collected Dec-Mar. From near sea level to 300m
From beating dead shrubs + trees, flying in hot sunshine, malaise trap

Specimens examined: Holotype ♀ of C. gibbosus, Holotype ♂ of M. tuberculatus, 12 non-type specimens (9 ♂♂, 3 ♀♀). (BMNH, MONZ, NZAC)

(XXX) reexamined March 2000.

Mitophyllus insignis Brown

(1)

9 Mitophyllus insignis Brown 1923

- NN 10[♂] ^{41°12'}_{172°45'} Flora Camp, 3000', [Mt Arthur], 5 Jan 1930, E S Gourlay (NZAC)
- OL 10[♂] ^{44°44'}_{167°15'} Routeburn, Fiordland, 27 Feb 1983, NE O'Brien, caught on the ground (NZAC)
- BRV 10[♂] 10[♀] Mt Dewar, 1000m, Paparoa Range, ex rotten branch, 11 Dec 1969, J.C. Watt (NZAC) ^{42°05'}_{171°34'}
- NN 10[♂] ^{41°13'}_{172°42'} Mt Arthur 3000'-4000', Nelson, South Is, 12-14 Jan 1918, under birch [sic] bark, A.C. O'Connor, A.E. Brookes Collⁿ? (NZAC)
- NN 10[♀] Baton Saddle, 4500', Nelson, 10 Jan 1961, J.I. Townsend, R.M. Ball Collⁿ? (NZAC) ^{41°15'}_{172°35'}
- NN 10[♀] Mt Owen, 4500', 4-10 Nov 1961, J.I. Townsend (NZAC) ^{41°33'}_{172°32'}
- OL 10[♀] Lake McKenzie area, Humboldt Mts, 10 Feb 1962, M. Sinclair (NMNZ) ^{44°47'}_{168°09'}
- NN 10[♂] Mt Arthur, 8 Jan 1918, A.C. O'Connor (NMNZ) [ex Holloway 1961]
- NN 10[♂] Mt Arthur, 4300', 16 Jan 1932, G.V. Hudson, Hudson Collection (NMNZ) [ex Holloway 1961]
- NN 10[♂] Mt Arthur, about 3,600', 8 Jan 1925, G.V. Hudson, Hudson Collection (NMNZ) [ex Holloway, 1961]
- NN 10[♂] Holotype Gordons Pyramid, [Nelson], no date, A.C. O'Connor (BMNH) [ex Holloway 1961]
- NN 10[♂] ^{41°11'}_{172°41'} Gordons Pyramid [Nelson], 13 Jan 1918, A.C. O'Connor, Hudson Collection (NMNZ) [ex Holloway 1961]

Mitophyllus insignis LUNZ material ✓

- BRV 10[♂] ⁴¹⁵⁶₁₇₁₃₇ Mt Kelvin, 1000m, 22 Apr 1984, P. Syrett, in small tarn, basin N of Mt Kelvin, southerly aspect.
- NN 10[♂] ⁴¹⁰⁶₁₇₂₃₈ Lake Sylvester, under stones, 9 Feb 1985, ~~P. Syrett~~, S.P. Worner
- OL 10[♀] ⁴⁴⁴⁹₁₆₅₀₈ Lake Howden, 750m, 8 Feb 1980, C.A. Muir, under bark
- NN 10[♀] ⁴¹⁰⁶₁₇₂₃₈ Lake Sylvester, Bushline Hut 1300m, 9 Feb 1985, P. Syrett & R.M. Emberson, at night

Correct New Northernmost record, ~~Mt Kelvin (BR) 4156~~
Lake Sylvester (NN) 41°06' ✓

OK. ✓

(10)

Mitophyllus irroratus Parry (1) (1) (1)
Mitophyllus irroratus (Note LCNZ = LUNZ)

- WN 5 ♂ → 2 ♀ Wellington, Feb 1958, R.G. Ordish (NMNZ) 41°17' 174°46'
- W 3 ♂, 1 ♀ Wellington, Coastline 0-200m, Makara, In rotten logs, 12 Jan 1981, Wellington Coast Botanical Survey, N. Elvidge + C.W. Hornabrook (NMNZ). 41°16' 174°42'
- W 2 ♂, 1 ♀ Wellington, Coastline 0-200m, Turakirae/Head, 16 Dec 1980, Wellington Coast Botanical Survey, N. Elvidge and C.W. Hornabrook (NMNZ) 41°27' 174°55'
- WA 3 ♂, 2 ♀ Mt Bruce, ex light trap, 18 Mar 1988, R.G. Ordish (NMNZ) 40°45' 175°36'
- WA 9 ♂, 1 ♀ " " " " " " 14 Feb 1988, P.M. Louis (NMNZ) 40°45' 175°36'
- SD 1 ♂, 1 ♀ Maud Island, 13 Jan 1995, Alan Tennyson (NMNZ) 41°01' 173°53'
- WO 1 ♂, 1 ♀ Te Maika, Kawhia, Dec 1966, M.M. Neill (NMNZ) 38°10' 174°42'
- WN 1 ♂, 1 ♀ Karori, 28 Mar 1995, ^{under log} A. Tennyson (NMNZ) 41°17' 174°44'
- TO 2 ♂, 1 ♀ Pureora SF, 13 Feb 1984, R.C. Crow (NZAC) 38°13' 173°37'
- BP 2 ♂, 1 ♀ Rereaurira Swamp, 27 Apr 1993, [to] MV lamp, JS Dugdale (NZAC) 37°36' 178°05'
- BP 1 ♂, 1 ♀ Lottin Pt, Orange Saddle, 11 Mar 1993, UV light trap, JS Dugdale (NZAC) 37°32' 178°10'
- HB 1 ♂, 1 ♀ Little Bush, ^{Franklin} Hawkes Bay, 30 Jan 1986, T.H. Davies (NZAC) 39°17' 176°33'
- SI 1 ♂, 1 ♀ Christmas Village, Stewart Island, 7 Feb 1991, on dead tree trunk at night, J.W. Early (LCNZ) 46°45' 167°59'
- ~~SI 1 ♂~~ Freds Camp, Stewart Island, 5 Feb 1991, night collecting on tree trunks, S.P. Worner (LCNZ)
- SI 1 ♂, 1 ♀ Mason Bay, Stewart Island, 2 Feb 1991, in sand dunes, S.P. Worner (LCNZ). 46°55' 167°45'
- NN 1 ♂, 1 ♀ Westport, 30 Jan 1935, E.S. Gourlay (NZAC) 41°45' 171°36'
- SI 1 ♀ Mason Bay, Stewart Island, 2 Feb 1991, rotting log in sand dunes, J.W. Early (LCNZ)
- SI 46°50' 168°05' 1 ♀ Port William Hut, Stewart Island, 9 Feb 1991, at night, P. Syrett, R.M. Emberson (LCNZ)
- BP 1 ♀ Otanga, Lottin Pt, 27 Apr 1993, as larva, JS Dugdale, em. 10 Aug 1993, ex rotting? manuka, reared (NZAC)
- GB 37°41' 178°32' 1 ♀ Rangiatea, 29 Nov 1992, under logs, G. Hall (NZAC)
- BP 37°38' 178°20' 1 ♀ Te Araroa, Tokala, 4 Feb - 14 Mar 1993, pit traps, J.S. Dugdale (NZAC)
- NN 41°14' 173°15' 1 ♀ Atawhai, 30 Jan 1969, A.C. Eyles (NZAC)
- NN 43°30' 172°44' 1 ♀ New Brighton, Christchurch, 20 Jan 1948, E.S. Gourlay (NZAC)
- NN 1 ♂, 1 ♀ → Whangamoa Saddle, NN, 27 Jan - 3 Feb 1979, pan trap in Nothofagus forest, A.K. Walker (NZAC) 41°13' 173°26'
- SL 5 ♂, 2 ♀ Papatowai, S. Otago, 27 Feb 1976, B.M. May (NZAC) 46°34' 169°28'
- NN 1 ♂, 1 ♀ 41°27' 172°58' Pretty Bridge Valley, 9 Mar 1966, Pit trap in pasture, G. Hitchings (NZAC)
- NN 1 ♂, 1 ♀ 41°15' 173°06' Mapua, Higgs Orchard, 12 Oct 1967, I. Brown, em 27 Feb 68, W67/87, /reared, (NZAC)
- WO/BP 1 ♂, 37°32' 175°44' Mt Te Aroha, 6 Mar 1985, TV transmitter, B.M. May (NZAC)
- CO 1 ♂, 45°03' 169°12' Cromwell, 1978, R. Olds (NZAC)
- NN 1 ♂ NN, Quebec Rd, 2 Oct 1963, quince, L.P. Marchant (NZAC)
- WN 1 ♂, 41°10' 174°50' Linden, 7 Feb 1973, in Fuchsia, RC Crow (RCColl¹²) (NZAC)

Mitophyllus irroratus Parry (2) M. irroratus. (2)

- ^{not indicated}
 NN 10[♂] Pretty Bridge (light) (trap) 9 Feb 1966, G.T. H. (itchings) (NZAC)
- TK 10[♂] → Paiaka, X C22, (MAN) NZ, Jan 1950, Light, Phormium Survey at Paiaka, R.A. Cumber (NZAC). 39°10', 174°36' ✓
- MC 10[♂] → Ashburton, 4 Feb 1966, in house, J.M. Kelsey (NZAC) 43°54', 171°45' ✓
- WI 10[♂] 30 → Turakina, NI, 3 Mar 1957, J.I. Townsend, RMBull Collⁿ (NZAC) 40°03', 175°13' ✓
- WN 10[♂] 40°32', 175°24' → Tokomaru Gorge, 10 Jan 1959, RMBull (RMBull Collⁿ) (NZAC)
- WI 10[♂] Turakina, Mar 1957, (coll ?), R M Bull Collection (NZAC) ✓
- WN 10[♂] 41°17', 174°44' → Karori 26 Nov 1918, T Braun Dup. Collⁿ no. 2813 (NZAC) ✓
- WI 20[♂] 20 → Turakina, 3 Mar 1957, (coll ?) R M Bull Collⁿ (NZAC) ✓
- NN 10[♂] 41°12', 173°22' → Wakapuaka, 7 Jul 1966, em 16 Dec 1966, reared dead elm wood, J.B.W. & J.I.T. (NZAC) ✓
- ? WN 10[♂] 40°40', 175°15' → Gladstone, 4 Mar 1961, E Sinclair (NZAC)
- NN 10[♂] 41°16', 173°17' → Nelson, Dec 1967, BA Holloway (NZAC) ✓
- SD 10[♂] 41°08', 173°41' → Opouri, Light trap, 17 Jan 1966, G.J. H. (itchings) (NZAC) ✓
- WN 10[♂] 41°11', 172°55' → Stokes V (Valley), Wellington, Dec 1951, BA Holloway, Compared with Lectotype of Mitophyllus irroratus Parry, det BA Holloway 1991 (NZAC) ✓
- NN 10[♂] 41°05', 173°00' → Rewaka [Riwaka] Valley, W. Nelson, 28-31 Jan 1949, Brookes & O'Connor, A.E. Brookes Collⁿ (NZAC) ✓
- MC 10[♂] 43°32', 172°38' → Woolston, Christchurch, 13 Feb 1964, Hg Vapor light trap, W.P. Thomas (NZAC) ✓
- NN 10[♂] 10 → Nelson, NZ, 24 Mar 1928, E.S. Gourlay (NZAC) ✓
- NN 10[♂] → Quebec Rd, Nelson, 6 Mar 1964, L. Marchant (NZAC) ✓
- NN 10[♂] 41°24', 173°03' → Wakefield, 20 Dec 1964, dead Plagianthus branch, em Jan 1965, G. Kuschel (NZAC) ✓
- NN 10[♂] → Quebec Rd, Nelson, 10 Jan 1966, L.P. Marchant (NZAC) ✓
- BP 10[♂] 30 → Te Aroha, 2000', 23 Nov 1967, Coprosma foetidissima (coll ?), duplicate larvae in alcohol (NZAC) ✓
- ND 20[♂] 34°26', 172°48' → Spirits Bay, Nth Auckland, 22 Jan 1966, in rotten Corynocarpus levigatus wood, reared, removed [from rearing container 7.7.66] AK Walker (NZAC) ✓
- * No locality 10[♂] Beech forest, 139, 10.2.23 (NZAC)
- NN 10[♂] 41°08', 173°00' → Lower Moutere, 13 Mar 1964, P. Main (NZAC) ✓
- Raoul } 10[♂] 29°16', 177°55' → Raoul I. June 1967, in dead Metrosideros, A. Blake (NZAC) ✓
- Raoul } 10[♂] → Raoul I., 11 Dec 1966, in dead Myrsine kermadecensis trunk, J.C. Watt (NZAC) ✓
- Raoul } ~~10[♂] → Raoul I., 12 Jan 1967, in decayed wood, J.C. Watt (NZAC)~~
- Raoul } 20[♂] 30 → Raoul I., 12 Jan 1967, in decayed wood, Metrosideros kermadecensis, J.C. Watt (NZAC) ✓
- Raoul } 10[♂] → Raoul I., Mt ~~Maui~~ Moumoukai 1700', 23 Jan 1967, under bark, dead Ascarina lanceolata, J.C. Watt (NZAC) ✓
- WN 10[♂] 41°16', 174°55' → York Bay, 4 Feb 1923, J.G. Myers (NZAC) ✓
- * No loc. 10[♂] No locality, 32/49 (NZAC)
- SD 10[♂] → Opouri Val., 21-24 Feb 1969, coll ? (NZAC) ✓
- WI 10[♂] 40°14', 175°34' → Feilding [as Fielding], Dec 1941, Rowhai, no other data (NZAC) ✓
- SD 10[♂] → Opouri Val., 26-27 Feb 1969, coll ? (NZAC) ✓
- NN 10[♂] 41°24', 173°08' → Roding V, above dam, Coriania arborica gall + dead branch 12' up, 27 July 1967, reared, em 4 Jan 1968, Coll ? (NZAC) ✓
- NN 10[♂] 41°23', 173°05' → Pigeon Valley, Wakefield, 7 Mar 1964, coll ? (NZAC) ✓
- SI 10[♂] 46°59', 167°53' → Rakeahu Val., 18 Feb 1968, to light, J.S. Dugdale (NZAC) ✓

M. irroratus Parry (3) M. irroratus (3)

- ✓ NN 1♂^{41°20' 174°07'} Rough I., Nelson, 3 Aug 1967, Melicytus ramiflorus branch, reared, em. 7 Dec 1967, J.C. Watt (NZAC)
- SD 1♂^{41°20' 174°07'} Port Underwood Saddle, 17 Dec 1968, reared, ex Pennantia corymbosa, W 68/49, J.C. Watt (NZAC).
- ✓ HB 1♂^{35°17' 176°32'} Puketitiri, 20 Jan 1986, T.H. Davies (NZAC) 43°28' 172°38'
- ✓ MC 2♂ 2♀ → Styx Mill, in molasses bait trap, Styx Mill Orchard, 4 Mar 1987, G. Burnip (NZAC)
- ✓ NN 1♂ Nelson, 23 Feb 1954, B.B. Given (NZAC)
- ✓ SD 1♂ 1♀ → Maud I., Old Homestead, 23 Dec 1980, ~~near~~^{among} chopping wood, overcast, southerly, P. R. Notman (NZAC) 41°01', 173°53'
- ✓ KA 1♂^{42°24' 173°41'} Blackmillar, Kaitioura, 30 Dec 1928, S. Lindsay (NZAC)
- ✓ ND 1♂^{34°26' 172°53'} Spirits Bay, 18 Jan 1966, in rotting wood, Mt Unuwhao 2113', B.M. May (NZAC)
- X - 1♂ No data [as M. phyllus macrocerus] (NZAC)
- ✓ WN 1♂^{41°06' 174°50'} Titahi Bay 22 Feb 1909 no other data (NZAC)
- ✓ HB 1♂ 2♀ → Hastings, ex oak, L.J. Dumbleton (NZAC) 39°35' 176°51'
- NN 1♂ Nelson, 24 April 1967, in house, G.W. Ramsay (NZAC)
- NN 1♂^{41°24' 173°09'} Lee Valley, Irvines, 1-6 Jan 1970, J.A. Farrell (NZAC)
- ✓ NN 1♂^{41°16' 173°17'} Upper Maitai, 20 Nov 1938, E.S. Gourlay (NZAC)
- HB 1♂^{39°17' 176°33'} Little Bush, Puketitiri, 3 Mar 1986, T.H. & J.M. Davies [left elytron used for SEM] (NZAC)
- not local X 1♂ Mackys (? Mackay's) Bluff, 12 Mar 1950 J. Timlin (NZAC)
- ✓ SD 1♂ Opouri Valley, mid Jan 1969, R.J.B. Power (NZAC)
- ND 1♂^{35°28' 174°44'} Poor Knights Is., Aorangi, Crater Valley, 13 Nov 1981, pupa in dead branch of Hedycarya, reared, em 24 Nov 1981, [Photographed specimen], J. S. Dugdale (NZAC)
- SD ^{40°45' 173°55'} ♀ D'Urville I., Kapowai, Feb 1971, G.W. Ramsay (NZAC)
- ~~WD ♀ Waipuna Res, Waitomo 28 Oct 1977, ex damp rotten wood on ground, reared 17/21, em 6 Jan 1978, B.M. May (NZAC)~~
- SD ^{48°50' 173°51'} ♀ D'Urville I., Kapowai, 16 Feb 1971, G. Kuschel (NZAC)
- SD 1♀ Maud I., Old Homestead, 18 May 1980, in a ~~web~~ cobweb on the outside window ledge, P. R. Notman (NZAC)
- ✓ ND 1♀ Spirits Bay, 22 Jan 1966, ex rotten wood, Corynocarpus laevigatus, reared, em 13 Jun 1967, A.K. Walker (NZAC) [Probably 1966]
- ✓ NN 1♀ Wakapuaka, Nelson, 12 Jan 1967, J.G. Walker (NZAC)
- ✓ ND ^{34°25' 172°57'} ♀ Tom Bowling Bay, Te Huka Stream, reared from larva in Ranuka, 14 Nov. 1967 J.R.G. McBurney (NZAC)
- ✓ MC 2♀ → New Brighton, Christchurch, 20 Jan 1948, E.S. Gourlay (NZAC) 43°30' 172°44'
- ✓ NN 1♀ Wakapuaka, Nelson, 7 Jul 1967, ex Pittosporum eugenoides, reared, em 17 Jul '67, J.I. Townsend & J.B. Waller (NZAC)
- lacks head
- ✓ SI ^{46°55' 167°45'} ♀ Mason Bay, Stewart I., 27 Nov 1968, J. Mc Burney (NZAC)
- SL ^{46°27' 168°25'} ♀ Tisbury, 9 Feb 1911, coll? (NZAC)
- X 1♀ No data (NZAC)
- ✓ SL 1♀ Tisbury, 2 Feb 1915, coll? (NZAC)
- ✓ ND 1♀ ^{in poor collⁿ} Spirits Bay, Mt Unuwhao 2113', in rotting wood, 18 Jan 1966 B.M. May (NZAC)
- NN ^{40°40' 172°40'} ♀ Aorere V., W. Nelson, Feb 1949, A.E. Brookes, A.E.B. Collⁿ (NZAC)

M. irroratus Parry (4) M. irroratus (4)

- ✓ ND 1 ♀ → Jacksons Bay, Niels Beach, 28 Feb 1966, G Kuschel (NZAC) 44°00', 168°20'
- ✓ WN 1 ♀ Karori, 26 Nov 1918, "2813 ♀" (Brown H/W) T.B. Duplicate Coll? (NZAC)
- ✓ WN 1 ♀ Wadestown, 6 Apr 1918, "2813 ♀ doubtful" "Hudson 68." T Brown D.C.? (NZAC)
- X 1 ♀ No locality "Brown Coll 1918" "2813 ♀" A.E. Brookes Coll? (NZAC)
- ✓ NN 1 ♀ → Aorere Valley, W Nelson, Feb 1949, A.E. Brookes, A.E. Coll? (NZAC) 40°40', 172°40'
- ✓ 1 ♀ Raoul Id, Denham Bay, 11 Jan 1967, in driftwood, J.C. Watt (NZAC) 29°16', 177°57'
- ✓ HB 1 ♀ Itave-lock North, March 1992, Royal Gala calyx, coll? (NZAC) 39°40', 176°53'
- ✓ ND 3 ♀ Spirits Bay, Nth Auck., 22 Jan 1966, rotten *Corynocarpus laevigatus* wood, reared, removed 7 July '66, A.K. Walker (NZAC)
- ✓ CL 1 ♂ 36°26', 175°46' Cuvier I., Nikau Grove, 27 Feb 1982, in rotten log, G. Hall (NZAC)
- ✓ ND 1 ♀ 29°16', 177°57' Poor Knights Is., Tawhiti Rahi, c. 1 Jan '56, x rotten wood, J.C. Watt (NZAC)
- ✓ CL 1 ♂ Red Mercury Pt., 31 Mar 1996, A. Tennysen (NMNZ) 36°37', 175°51' (examined 11/1/93)

Specs. examined here: 105 ♂♂, 63 ♀♀ (NZAC, NMNZ, LCNZ)

- ND (incl Poor Knights) ^{Red Mercury Pt.} CL (Cuvier I.) WO, BP, GB, TO, TK, HB, WI, WA, WN, SD, NN, KA, WD, MC, CO, SL, SI

Northernmost - NZ record: Spirits Bay (ND), 34°26'S, 172°48'E, also on Raoul I (Kermadec Is) 29°16'S, 177°55'E; southernmost records: Rakeahua Valley (SI) 46°59'S, 167°53'E.

○ From sl to about 645 m.
 Biological: (oldest Adults) have been collected in Jan - April, Jun - Aug, + Oct - Dec. They have been found in & under rotten logs, on the ground, on tree trunks at night, pit traps in pasture, pan traps in *Nothofagus* forest, in sand dunes, inside houses, at molasses bait traps, attracted to light traps + mercury vapour lamps, in dead ^{of decayed wood} *Myrzine kermadecensis*, *Metrosideros kermadecensis*, *Coprosma foetidissima*, oak + quince, under bark of dead *Ascarina lanceolata*, + in the calyx of a Royal Gala apple.
 Larvae ^{have been found} ~~were collected~~ in Jan, April, + October in rotten wood ^{or dead branches} of *Corynocarpus laevigatus*, *Plagianthus* (~~bracteata~~), *Coprosma foetidissima*, elm, *Conaria arboria* (dead branch ^{12" up in tree}), *Meliclytus ramiflorus*, *Pennantia corymbosa*, *Hedycarya*, ^(changed since 2009) *Ranuka*, *Pithecolobium eugenoides*. Adults were successfully reared ^{in the laboratory} from these larvae, emerging within 4-6 months from the date the wood samples were collected.

○ Remarks: The most widespread NZ lucanid, its range extending as far north as The Kermadec islands. Interestingly no specimens have been collected in the Auckland area where it is replaced by *M. arcuatus*. The two spp are virtually sympatric in 2 places: in BP: Mt Te Aroha 37°32', 175°44' (*irroratus*) + Okanua 37°47', 175°50' (*arcuatus*) + in WO: Te Maikua, Kawhia 38°06', 174°46' (*irroratus*) + Karamu, (near Pirongia) 37°53', 175°10' and Waitomo 38°16', 175°08' (both *arcuatus*)

(10)

Mitophyllus macrocerus
(Braun)

Mitophyllus macrocerus
(Braun, 1886).

- AK 1 ♂ ^{36° 54'}_{174° 35'} Walkers Bush, Waitakere Ra, 7 Mar 1982, swept JS Dugdale (NZAC)
- ND 4 ♂ ^{35° 49'}_{174° 31'} Mt Maniaia, ^{400m} 21 Jan 1981, Beating shrubs, BA Holloway (NZAC)
- ND 1 ♂ ^{35° 13'}_{173° 31'} Mangamuka 1250', 1 Feb 1962, BM May (NZAC)
- ND 1 ♂ ^{34° 28'}_{172° 46'} South Pandora Track, Te Pahi Coastal Road, 7 Feb 1975, S Nichols, in dead twig, Leptospermum ericoides (associated larvae in alcohol), (NZAC)
- ? 1 ♂ Puketoto Reserve, nod. except Ceratignathus macrocerus Braun, det Gourlay 22.1.62, ES Gourlay, Acc. 1970, Ent. Div. (NZAC)
- ND 10 ♂ ^{34° 26'}_{172° 54'} Unuwhao, ^{385m} near Spirits Bay, Northern NZ, 30 Dec 1947, in leaf mould, coll. N. Gardner, A E Brookes Collⁿ (NZAC)
- ND 20 ♂ ^{35° 12'}_{173° 32'} Mangamuka Summit, 17 Feb 1967; beaten, BM May (NZAC)
- ND 1 ♂ ^{35° 14'}_{173° 35'} Onohuka Kauri Reserve, 21 Jan 1972, litter, G.W. Ramsay [specimen lacks head & is in very poor condition] (NZAC)
- ND ^{35° 35'}_{173° 31'} 1 ♀ Wairau Summit 457m, Waipoua S.F. 18 Oct 1967, reared, em 5 Jan 1968 from W67/106, JS Dugdale (NZAC)
- ND ^{35° 33'}_{173° 33'} 1 ♀ Waipoua S.F., Waipoua Stm, 16-21 Mar 1978, malaise trap in forest clearing, S & J. Peck (NZAC)
- AK 10 ♂ ^{36° 41'}_{174° 28'} (holotype), Helensville, nodate, Braun (BMNH) (Holloway 61)
- ND ^{35° 31'}_{173° 42'} 1 ♀ Waimakenui, 15 Mar 1947, in rotten vine, CE Clarke (AMNZ) (ex Holloway 61)

ND, AK.

Northernmost record: Unuwhao (ND) (near Spirits Bay 34° 26' S); southernmost record: Walkers Bush, Waitakere Ra (AK), 36° 54' S

Collected Dec-March. From near s.l. to about 460m.

From beating ^{sweeping} shrubs, malaise trap, litter, leafmould, dead twig of Leptospermum ericoides. Reared from W67/106 larvae assoc with adult in lept.eric. dead twig. Spec on Mt Maniaia flying actively at midday, hot weather, landed in shrubs, 4 males collected.

Specs examined holotype ♂, 12 n. type ♂♂, 3 ♀♀ (AMNZ, BMNH NZAC)

Mitophyllus macrocerus

LUNZ material

ND ✓ 10 ♂ ³⁵³⁹_{173° 33'} Te Matua Ngahere, Waipoua Forest, 4 Feb 1975, Swept, R.H. Blank.

OK.

(12) 140 Mitophyllus parrianus Westwood (1) (1)

Mitophyllus parrianus

- SI ✓ 1 ♂ ⁴⁷¹⁴₁₆₇₂₈ Big South Cape I, SW Stewart I, 10 Feb 69, A.C Eyles (NZAC)
- SI ✓ 1 ♂ ⁴⁶⁵²₁₆₈₀₈ Port William, Stewart I, 7 Feb '69, rotten tree-Senecio, B.A Kusche (NZAC)
- " 1 ♂ ✓ Big S. Cape I, Stewart I, Feb '69, NE [B.S.C.] J.I Townsend, at night, (NZAC)
- " 1 ♂ ✓ " " " , SW Stewart I, 13 Feb 69, [on] Stilbocarpa at night, B.A Kusche (NZAC)
- MB ✓ 1 ♂ ⁴¹¹⁹₁₇₃₂₅ Maungatapu Valley, Marlborough, 24 July 67, F. A lack (NZAC)
- SI 1 ♂ ✓ 2 ♀ Long I, NE, SW Stewart I, Exp. Nov '68, rata, J. McBurney (NZAC)
- NN ✓ 1 ♂ ⁴¹¹⁷₁₇₃₂₀ Upper Maitai, Nelson, 1 Dec 71, J. I. Townsend (NZAC)
- MC ✓ 1 ♂ ⁴³¹⁴₁₇₁₂₁ 1 ♀ Mt Algidus, 2000', 2-13 Dec 59, J.I Townsend (NZAC) Illustrated 14.12.77 D.W. Helmore
- SI ✓ 1 ♂ ⁴⁶⁵⁹₁₆₇₅₃ Rakeahua Valley, Stewart I, 14 Nov '68, totara, J. McBurney (NZAC)
- SI 1 ♂ ✓ " " " 19 Jan 69 " " "
- ND ✓ 1 ♂ ³⁵⁴³₁₇₄₁₉ Whangarei, N Auckland, 5 Apr 26, E. Fairburn, A.E Brooks Collⁿ, Det C. parrianus, Holloway 1959 (NZAC)
- SI 1 ♂ - 2 ♀ NE Big South Cape I, SW Stewart I, 16 Feb 69, Dracophyllum longifolium J. McBurney (NZAC).
- MC 1 ♂ ✓ Mt Algidus, 2000', 2-13 Dec 59, J.I Townsend (NZAC)
- AK ✓ 1 ♂ ³⁶⁴⁸₁₇₅₀₇ Waiheke I, 16 Aug 43, G Chamberlain, C. parrianus det. BAH 1957 (NZAC)
- " 7 ♂ ✓ 7 ♀ " " 5 Sep 76, in Prunus persica stump, J.S Dugdale (NZAC)
- " 1 ♂ ³⁶⁵⁶₁₇₄₃₉ Tihirangi, 22 Jan '53, ex light trap, C.R. Thomas (NZAC) det BAH 1957
- SI 1 ♂ ✓ Big South Cape NE, SW Stewart I, Feb '69, Hebe/flax at night, J. McBurney (NZAC)
- NN ✓ 1 ♂ ⁴¹²⁹₁₇₃₀₅ Wairoa Gorge, Nelson, 25 Oct 1931[⊗], E.S Gourlay, det. BAH 1957 (NZAC)
- AK ✓ 1 ♂ ³⁶⁵¹₁₇₄₃₃ Waitakere, 14 May 1939, K. Harrow, det BAH 1957 (NZAC)
- " 1 ♂ ✓ Tihirangi, 1945, M.W Carter, det BAH 1957 (NZAC)
- TK ✓ 1 ♂ ³⁸²⁸₁₇₅₀₁ Piopio 9 July '61, B.M May, ex rotten log (NZAC)
- SD ✓ 1 ♂ ⁴⁰⁵⁰₁₇₃₅₁ Dillville I, Cook Strait, 14 Jan '31, E. Fairburn, det BAH 1959 (NZAC)
- TO ✓ 1 ♂ ³⁹²⁵₁₇₅₂₅ Ohakune, 4 Jan 62, C+G Laurie (NZAC)
- WN ✓ 1 ♂ ⁴¹¹⁵₁₇₄₅₇ Wainuiomata, 12 Dec 61, back doorstep, C+G Laurie (NZAC)
- SI 1 ♂ ✓ 2 ♀ Rakeahua V, Stewart I, 19 Nov '68, Macropiper excelsum J. McBurney (NZAC)
- AK ✓ 1 ♂ ³⁶⁵²₁₇₄₄₆ Grafton, Auckland, 4 Dec '59, on wall of house, A.M Richards (NZAC)
- SL ✓ 1 ♂ ⁴⁶²⁶₁₆₈₂₄ Tisbury, 2 Feb '15, n.o.d. (NZAC)
- NN ✓ 1 ♂ ⁴¹¹⁶₁₇₃₁₇ Nelson, 26 Nov 43, ex light trap, B.B Given (NZAC)
- NN ✓ 1 ♂ ⁴¹¹⁰₁₇₃₂₂ McKays Bluff, 2000', Nelson, 8 Nov 44, E.S Gourlay, det BAH '57 (NZAC)
- AK ✓ 1 ♂ ³⁶⁵⁵₁₇₄₃₇ Oratia, 6 Nov 41, D. Drake, telegraph poles, det BAH '57 (NZAC)
- SI 2 ♂ ✓ Long I, NE, SW Stewart I. Exped Nov 68, Olearia, J. McBurney (NZAC)
- OL ✓ 1 ♂ ⁴⁴⁴⁰₁₆₈₂₀ Hollyford Riverbed, 10 Dec 66, ex dead log, A.K Walker (NZAC)
- BR ✓ 1 ♂ ⁴²⁰⁴₁₇₁₅₅ Capleson, 21 Sep 72, Nothofagus log, J.C Watt Beech Forest Utilⁿ Project (NZAC)
- AK ✓ 1 ♂ ³⁶⁵³₁₇₄₃₈ Henderson, 29 Apr '81, in firewood, J.C Watt (NZAC)
- BR ✓ 1 ♂ ⁴¹⁵⁹₁₇₁₅₃ Fletchers Creek, 26 Jan 72, under bark of dead standing Nothofagus fusca, J.C Watt, BFUP, (NZAC)
- GB ✓ 3 ♂ ³⁸⁰⁸₁₇₈₂₁ Tokomaru Gorge, 8 Oct '59, R.M Bull (NZAC)
- ? 1 ♂ ? Pretty Bridge, Nelson, 2 Mar 65, M.V L[ight] T[r]ap G.J.H [elson] (NZAC)
- 1 ♂ NZ/WO [no other locality, 28 Oct '77, rotten wood, B.M May (NZAC)
- BR ✓ 1 ♂ ⁴²²³₁₇₁₁₅ Rapahoe, 20 Jan 57, E.S Gourlay (NZAC)
- GB ✓ 1 ♂ ³⁸⁴⁶₁₇₇₀₆ Lake Waikaremoana 1 Dec 29, J.S. Armstrong (NZAC)

⊗ date of birth, B.A Holloway!

266¹ 13♀

Mitophyllus parrianus Westwood (2) (2)

Mitophyllus parrianus (2)

- WN ✓ 1♂⁴¹¹⁵₁₇₄₄₆ Ngairo, Wairoa, Aug 1970, in log, R C Crow (NZAC)
- 1♂[✓] [No locality] 446, A E Brookes Collⁿ, det BAH 1959 (NZAC)
- AK ✓ 1♂³⁶⁵³₁₇₄₄₃ Mt Albert, AK, Jan 1958, B M May, det BAH 1959 (NZAC)
- WO ✓ 1♂³⁸³⁵₁₇₄₅₀ Mahoenui, 29-30 Oct 1977 B M May, collecting in rotten wood and under logs, associated larvae in alcohol (NZAC)
- NN ✓ 2♂⁴¹⁰²₁₇₃₀₁ Kaiteriteri Beach, Tasman Bay, 4 Oct '58, R M Bull (NZAC)
- BR 1♂[✓] 1♀ Caplestown, 21 Sep 72, Nothofagus log, J C Watt, associated larvae in alcohol, Ceratognathus parrianus PHOTOGRAPH (NZAC)
- BP ✓ 1♂³⁷³²₁₇₅₄₅ Mt Te Aroha, 6 Mar 1985, at TV Transmitter, C F Butcher (NZAC)
- AK ✓ 1♂³⁶⁵¹₁₇₄₄₄ Lynfield, 4 Jan 1981, Malaise Trap 4+5, G. Kuschel (NZAC)
- " 1♂[✓] " " Tropicana Drive, 21 Aug 76, x Melicetus ramiflorus G Kuschel (NZAC)
- " 1♂[⊗] " " 10 Aug 1980, Malaise trap 4 G Kuschel (NZAC)
- " 1♂[⊗] " " 21 June 1975, G. Kuschel (NZAC)
- " 2♂[⊗] " " 4 May 1975, litter 75/103, G. Kuschel (NZAC) *M. falcatus* n.sp.
- " 1♂[⊗] " " 13 Apr 1975, litter 75/74 G. Kuschel (NZAC)
- " 1♂[⊗] " " 3 Aug 1980, Malaise trap site 4, G Kuschel (NZAC)
- FD ✓ 3♂⁴⁵⁴²₁₆₃₈₁ 1♀ Resolution I, May 1982, ex rotten wood (R.3), C F Butcher (NZAC)
- " 1♂[✓] " " Disappointment Cove, May 1982, ex rotten wood (R.3), C.F. Butcher (NZAC)
- AK 3♂[✓] ^{M. falcatus} ~~Wattle Bay~~ [Lynfield] 20 Sep 1981, ex rotten wood, C.F. Butcher (NZAC)
- AK ✓ 1♂[⊗]³⁷⁰⁰₁₇₄₃₄ Huia, 24 Sep 1976 [as larva], old dead stump Leptospermum, reared W76/17, em 21 July 1977, B M May (NZAC). *M. falcatus* n.sp.
- ND ✓ 1♂[⊗]³⁵⁴⁹₁₇₄₅₁ ~~Mt Mania~~, Whangarei, 14 Mar 1970, in dead wood, B.M. May (NZAC) ^{M. falcatus}
- FD 2♂[✓] 1♀ Resolution I, May 1982, litter 82/65, C F Butcher (NZAC)
- CL ✓ 1♂³⁶³⁴₁₇₅₂₂ Ongahi Stream, 20m, 18 Mar 1980, B M May, BA Holloway (NZAC)
- HB ✓ 2♂³⁹¹⁷₁₇₆₂₂ Kaweka Ra 965m, Ngahere Basin, 20-27 Dec 1983, window trap, J C Watt (NZAC)
- SI 1♂[✓] Big South Cape I, NE moor, SW Stewart I, 14 Feb 1969, under Olearia log, B M May (NZAC)
- BP ✓ 1♂³⁷⁴⁷₁₇₆₂₀ Te Puke, Griffins Farm, 2 Jan 1976, ex molasses, A M Ferguson, used elytra for SEM (NZAC)
- ? 1♂[?] Opouri, 1 Feb 1966, light trap, G. J H [Elsan] used SEM, for coxa and femoral patch (NZAC)
- 1♂[✓] - no data (NZAC)
- NN ✓ 1♀ ~~at~~ Mackeys [McKays] Bluff, 20 Feb 49, E S Gourlay (NZAC)
- SI ✓ 1♀⁴⁶⁵⁵₁₆₇₄₅ Mason Bay, Stewart I, 27 Nov 1968, J. McBurney (NZAC)
- SI ✓ 1♀⁴⁶⁵²₁₆₈₀₈ Port William, Stewart I, 7 Feb 1969, rotten tree Senecio, BA Kuschel (NZAC)
- SL ✓ 1♀⁴⁵⁵⁷₁₆₉₁₆ Tapanui, 1955, Mr Wilson (NZAC)
- HN ✓ 1♀ Nelson, DSTR, 19 Aug 1966, J C Watt (NZAC) *M. falcatus* n.sp.
- SI ✓ 1♀ Big South Cape I. (NE), SW Stewart I, 13 Feb 69, under Olearia log, B M May (NZAC)
- SL ✓ 1♀⁴⁶³²₁₆₈₁₈ Greenhills, Southland, Dec 1944, E.M. Boyd (NZAC)
- ND ✓ 1♀³⁵⁵⁹₁₇₃₃₃ Waipoua [Forest] S.F., 12 Jun 1966, in rotten (fimy) log J.C. Watt (NZAC)
- NN-MB ✓ 1♀⁴¹¹⁸₁₇₃₃₄ Pelorus Bridge, July 1953, in hardwood pole, PBT Dept. (NZAC)
- WN ✓ 1♀⁴¹⁰⁶₁₇₄₅₀ Titahi Bay, 21 Feb 1909, nod. (NZAC)
- MC ✓ 1♀ Mt Algidus, 8-12 Nov. 1948, E S Gourlay (NZAC)

* Curved mandibles.
= *falcatus* n.sp.

0♂ 52♀

Mitophyllus parvianus Westwood (3)

(3)

Mitophyllus parvianus (3)

- MC ✓⁴³³²₁₇₂₃₅ 1♀ Riccarton Bush, Christchurch, 4 Dec 41, ES Gourlay, det BAH '57 (NZAC)
- BP ✓³⁷⁴¹₁₇₆₁₀ 1♀ Tauranga, 20-26 Mar '31, ES Gourlay, det BAH '57 (NZAC)
- SD ✓ 1♀ D'Urville I, 13-17 Jan '31, ES Gourlay, det BAH '57 (NZAC)
- TO ✓³⁹⁰³₁₇₅₂₃ 1♀ Oio, 20 Jan '36, F Gardiner, det BAH '57 (NZAC)
- WI ✓⁴⁰¹¹₁₇₅₂₃ 1♀ Bulls, 25 Apr '44, ex Maire log, Major Wilson det BAH '57 (NZAC)
- AK ✓³⁷⁰³₁₇₄₃₆ 1♀ ~~Orua Bay 10 Apr '44, D. Spiller, det BAH '57 (NZAC)~~ - *M. falcatus* n.sp.
- AK ✓ 1♀ Waiheke I, 16 Aug 63, G Chamberlain, det BAH '57 (NZAC)
- SD ✓ 1♀ D'Urville I, 20-24 Jan '46, ES Gourlay, det BAH '57 (NZAC)
- AK ✓ 1♀ Oratia, 6 Nov '44, telegraph poles, D. Drake, det BAH '57 (NZAC)
- ✓ 1♀ No number, nod. (NZAC)
- SI ✓ 1♀ Rakeahua V, Stewart I, 16 Nov '68, Macropiper excelsum (NZAC)
- SI ✓ 1♀ Longl. (N. East), SW Stewart I, Olearia, Exp. Nov. 68, J McBurney (NZAC)
- ✓ 1♀ no data (NZAC)
- BP ✓³⁷⁵²₁₇₇₃₆ 1♀ Motu River, Bay of Plenty, May 1928, A E Brookes (NZAC)
- SI ✓⁴⁶⁵⁴₁₆₈₀₈ 1♀ Halfmoon Bay, Stewart I, 7 Feb 68, ex Weinmannia, G. Kuschel (NZAC)
- BR ✓⁴¹⁵³₁₇₂₄₈ 3♀ Lake Rotoiti (head of), Travers R [river], 11 Oct '64, ex rotten log, A K Walker (NZAC)
- NN ✓⁴⁰⁵⁷₁₇₂₅₂ 2♀ Canaan 2000', W Nelson, 17-26 Jan 49, Brookes & O'Connor, det BAH '59 (NZAC)
- SI ✓ 1♀ Big South Cape I (NE), SW Stewart I, 16 Feb 69, J. I. Townsend (NZAC)
- HB ✓⁴⁰⁰⁷₁₇₆₁₄ 1♀ Makotuku, Feb '19, 446, Brookes Collⁿ (NZAC) det BAH '59
- SI ✓ 1♀ Big S. Cape I. (NE), SW Stewart I, Feb '69, J McBurney (NZAC)
- SI ✓ 1♀ Longl. (NE) SW Stewart I, Exp. Nov 68, rata, J. McBurney (NZAC)
- SI ✓ 1♀ Big S. Cape I. (NE) " " 16 Feb 69, J I Townsend (NZAC)
- BP-WOV ✓³⁷⁴⁷₁₇₅₅₀ 1♀ Okauia, Dec 1924, A E Brookes Collⁿ, det BAH '59 (NZAC)
- NN ✓⁴¹⁰⁷₁₇₃₀₁ 1♀ Motueka, Nelson Prov. 27 Jul 68, under manuka bark, nod. (NZAC)
- ND ✓³⁴²⁶₁₇₂₄₈ 1♀ ~~Spirits Bay, Northland Nov 67, J I Townsend (NZAC)~~ *M. falcatus* n.sp.
- TK ✓³⁸²⁸₁₇₅₀₁ 2♀ Piopio, 9 Jul 1961, D Gardiner, X rotting log (NZAC)
- OL ✓⁴⁵¹⁶₁₆₈₄₁ 1♀ Mt Dick, 17 Mar 1914, 446, T Bruns Dup. Collⁿ, det BAH '59 (NZAC)
- GB ✓ 5♀ Tokomaru Gorge, 8 Oct 59, R M Bull (NZAC)
- TO ✓³⁹¹⁸₁₇₅₃₄ 1♀ Chateau, 914m, Mt Ruapehu, 16 Jan '75, J C Watt (NZAC)
- ✓ 1♀ Mitophyllus parvianus [Brouns handwring] 446, T Br. Dup. Collⁿ, nod, det BAH 59 (NZAC)
- AK ✓³⁶⁵⁰₁₇₄₄₅ 1♀ Auckland, flying at night, Dec '55, G. Fairfield, J.C Watt Collⁿ (NZAC)
- WN ✓⁴¹⁰⁹₁₇₄₄₈ 1♀ Colonial Knob, Linden, 1300', 18 Oct '70, in rotten log, RC Crow (NZAC)
- ? ? 1♀ Blue Lake, 17 Jan '58, R M Bull (NZAC)
- SC ✓⁴³⁵⁵₁₇₁₁₆ 2♀ Peel Forest, 20 Jan '63, R M Bull (NZAC)
- BP ✓ 2♀ Mt Te Aroha Summit, 1000m, 3 Nov '77 (larva), ex dead trunk, reared W77/25, em 22 Mar 78 + em 21 Jun 1978, B.M. May (NZAC)
- BP ✓ 1♀ Te Puke, Griffen [Farm], 7 Jan '76, malaise trap, A M Ferguson (NZAC)
- ? — 1♀ Lake Rotoiti, 24 Jan 1949, nod. (NZAC)
- FD ✓⁴⁵²³₁₆₇₃₅ 1♀ Mt Luxmore 4-500' [400-500] 9 Feb '63, R M Bull (NZAC)
- ND ✓³⁵¹⁹₁₇₄₁₇ 1♀ Ngaitonga Saddle, South Russell, 1 Jan '61, under log, J C Watt (NZAC)
- FD ✓ 1♀ Mt Luxmore 3000', W Lake Te Anau, 9 Feb '63, R M Bull (NZAC)
- GB ✓³⁸⁴³₁₇₇₀₁ 1♀ S. end Putaihina Ridge 3800', Huiarau Ra, 2 Mar '71, J. I. Townsend (NZAC)
- HB ✓ 1♀ Kaweka Ra, 950m, Ngahere Basin, 22 Dec '83, on trunks at night J.C Watt (NZAC)
- FD ✓ 1♀ Resolution I, May 1982, ex moss (RI), C F Butcher (NZAC)
- u ✓⁴⁵¹⁴₁₆₆₅₅ 1♀ Secretary I, 25 Nov '81, in rotten wood, C F Butcher (NZAC)

23♂ 33♀ *Mitophyllus parrianus* Westwood (4) (4)

Mitophyllus parrianus

- BR ✓ 1♀ Fletchers Creek, 9 Nov 71, G Kuschel, Beech For. Util² Proj. (NZAC)
- AK ✓ 1♀ Huia, 23 Aug 80, on log beside dam, B M May (NZAC)
- ~~✓ 1♀ Lynfield 3 Aug 80, Malaise trap site 5, G. Kuschel (NZAC) M. falcalus n.sp.~~
- ~~✓ 1♀ Lynfield, Tropicana Dr, 23 Nov 74, G. Kuschel (NZAC) M. falcalus n.sp.~~

Additional data from Holloway (1961)

- ND ✓ 1♀ Waipoua Forest 1930, A C Forbes (NMNZ)
- ND ✓ 1♂³⁵⁴³₇₄₁₉ 2♀ Western Hills, Whangarei, 21 May 1927, E Fairburn (CMNZ)
- AK 1♂ ✓ Waiheke I., 12 Dec '49, G Chamberlain (NMNZ)
- TK ✓ 1♂³⁹¹²₁₇₃₅₃ Okato, no date, Hutton Coll² (NMNZ) (CMNZ)
- TO ✓ 1♂³⁹¹⁰₇₅₂₄ 1♀ National Park, 24 Dec '39, A. Richardson (AMNZ)
- TO ✓ 1♂³⁹²⁵₇₅₂₅ 1♀ Ohakune, 10 Mar 1920, M. Harris (AMNZ)
- TO ✓ 1♀ " 23 Feb 1927, A Castle (NMNZ)
- TO-RV ✓ 1♂³⁹²⁷₁₇₅₃₁ Karioi, no date, E Fairburn (NMNZ)
- WN ✓ 1♂⁴⁰⁵²₁₇₅₂₅ Mt Holdsworth, 4 Feb 1919, H. W Simmonds (NMNZ)
- WN ✓ 1♂⁴¹⁰⁵₁₇₅₁₁ Kaitoke Reserve, 19 Jan 59, R G Ordish (NMNZ)
- WN ✓ 3♂⁴¹⁰⁸₇₅₀₄ 3♀ Upper Hut, 9 Feb 1913, A. C O'Connor (NMNZ)
- WN ✓ 1♂⁴¹⁰⁶₁₇₅₀₂ 1♀ Moonshine, Feb 1907, " " " (" ")
- WN ✓ 2♂³⁹¹⁹₁₇₄₅₇ Paekakariki, 25 Aug '41, D. Hunt (CMNZ)
- WN ✓ 1♂⁴¹⁰¹₁₇₄₅₅ 1♀ Paekakariki Hill, 9 Sep '41, " " (")
- WN ✓ 2♂⁴¹¹⁵₁₇₄₄₆ 6♀ Wadestown, 1916, A C O'Connor (NMNZ)
- WN ✓ 2♂⁴¹¹⁴₁₇₄₄₇ 2♀ Khandallah, 12 May 49, G. Ramsay (NMNZ)
- WN 4♀ ✓ " 11 Sep 49 " " (")
- SD ✓ 1♀ D'Urville I., Cook Strait, 14 Jan 1931, E Fairburn (NMNZ)
- NN ✓ 1♂⁴¹²⁷₇₂₄₉ 2♀ Motupiko, 18 Apr 49, G Ramsay (NMNZ)
- BR ✓ 1♂⁴²¹⁷₁₇₁₁₂ Greymouth, 6 Jan '45, E Fairburn (")
- ? 1♀ ? Hende's Ferry, Dec 1915, J. Hende (CMNZ)
- SC ✓ 1♀ Peel Forest, 7 Feb '46, R R Forster (NMNZ)
- OL ✓ 1♂⁴¹⁴₁₆₉₁₄ 1♀ Makarora, N. Lake Wanaka, 5 Jan '24, coll? (AMNZ)
- DN ✓ 1♂⁴⁵⁴⁶₁₇₀₃₅ Waitati, 6 Dec '16, C. E. Clarke (AMNZ)
- FD ✓ 1♂⁴⁵⁷₁₆₇₅₂ Worsley Arm, Lake Te Anau, 29 Dec '24, A. Richardson (AMNZ)
- FD ✓ 1♂⁴⁵³³₁₆₇₅₇ Hope Arm, Lake Manapouri, 4 Jan '23, coll? (AMNZ)
- FD/SL 1♂⁴⁶¹³₁₆₇₃₀ Tewaewae Beach, 14 Feb '47, C. E. Clarke (AMNZ) ←
- SI ✓ 1♂⁴⁷¹⁰₁₆₇₃₄ 1♀ Easy Cove, Stewart I., 26 Jan '55, R. K. Dell & B. A. Holloway (NMNZ)
- SI ✓ 1♂⁴⁷¹³₁₆₇₂₆ 1♀ Solomons I. " " area, 25 Jan 55 " " " (")
- SI ✓ 2♀ Big South Cape I. " " " 24 Jan 55 " " " (")

- ~~AK 1♀ Lynfield, AK 9 Nov 1980, Malaise Trap 5, G Kuschel (NZAC) M. falcalus n.sp.~~
- AK 1♂ Auckland, 1928, C E Clarke, det. C. parrianus, BAH 1957 (NZAC)

See next page for additional material

Have been plotted & recorded. ~~Add these data to descript~~

2007, 12 ♀ Mitophyllus parvianus ⁽⁵⁾ ~~present material; not mapped etc.~~ ⁽⁵⁾
Westwood

BP 3 ♂ Te Koa, Twin Puriris, 120m, rotten log, 29 Apr 1993, JS Dugdale, ex *Beilschmiedia rawaroa* log, em 26 July 1993 (NZAC) ^{37°35', 178°18' ✓}

" 1 ♂ 1 ♀ Te Koa, Puriri Twins Track, 29 Apr 1993, JS Dugdale, ex rotting log *Beilschmiedia rawaroa*, em 10 Sep 1993, ~~larva and pupa~~ present (NZAC) ^{37°35', 178°18' ✓}

GB 3 ♂ 3 ♀ Paoneone, 28 Sep 1993, as larva, G. Hall, ex Kanuka branches on ground, em 28 Dec 1993 (NZAC) ^{37°39', 178°21' ✓}

GB 1 ♀ Paoneone, S side, 2 May 1993, as larva, G. Hall, ex Kunzea, em 15 Nov 1993 (NZAC) ^{37°39', 178°21' ✓}

~~BP~~ ^{Wrongly labelled} 1 ♀ Te Koa, 29 Apr 1993, JS Dugdale, ex rotten *Beilschmiedia* log em 23 Aug 1993 (NZAC) ^{37°35', 178°18' ✓}

GB 1 ♀ Paoneone, Te Araroa, as larva, 28 Sep 1993, G. Hall, ex rotten Kanuka branch on ground, em 26 Jan 1994 (NZAC) ^{37°39', 178°21' ✓}

WN 8 ♂ 2 ♀ Khandallah, ^{Wellington} 4 May 1963, C. McCann (NMNZ) ^{41°14', 174°47' ✓}

TO 1 ♂ ^{38°04', 175°51' ✓} Waimarino, 4 Jan 1922, G. V. Hudson, T. ^{Cockcroft} Cockcroft Collection (NMNZ) ✓

RI 1 ♂ ^{38°59', 175°52' ✓} Apiti, Jan 1917, ex collection J.G. Myers, T. Cockcroft Collection (NMNZ)

AK 1 ♂ ^{36°07', 175°22' ✓} Great Barrier Is, Motairehe, Katherine Bay, 20 Apr 1966, S. Leask (NMNZ)

WN 1 ♂ 2 ♀ Wellington Dist., Khandallah, Dec. 1963, C. McCann (NMNZ) ✓

BP 1 ♂ Tiki Pere, Rotorua, 15 Nov 1973, R.G. Ordish (NMNZ) ^{38°04', 176°22' ✓}

AK 1 ♀ Motairehe, Great Barrier Is, 22 Nov 1963, R.G. Ordish (NMNZ) ✓

Total: 24³ ~~2~~ new type specimens (119 males, 124 females) + holotype examined of *M. marmoratus* Waterhouse. (AMNZ, BMNH, CMNZ, NMNZ, NZAC)

CL 1 ♂ (incomplete) Okahutahi Catchment, Moehau, "Mis-Trust", Apr 1990, W. Todd, ex rotten mahoe log (NZAC) (has been in MS + map) ^{36°31', 175°26' ✓}

~~Revised from BP, GB, WN, TO, RI, AK~~

Mitophyllus reflexus (2)

Brown

Mitophyllus reflexus LUNZ material

- CI 176°13W
44°17'5" ♀ Pitt I, Waipaua Scenic Res., Half Chain, 16 Jan 1980, C.A. Muir, Dracophyllum log.
- CI 107° Pitt I, Canister Cove Scientific Res., 12 Jan 1990, CA Muir, in rotten wood
- CI 176°30W
43°52'5" ♀ Chatham I, Hapupu, 3 Dec 1992, RM Emberson, on trees at night
- CI 176°10W
44°21" ♀ Rangatira, 29 Nov 1992, P. Syrett, on tree at night
- CI 107° Rangatira, 29 Nov 1992, JW M. Marris, on tree trunk at night.

Rangatira ≡ South East

14

Mitophyllus solox Holloway Have been plotted. (1)
Mitophyllus solox, n.sp. East Cape.

- BP 1 ♂ ^(FOLO TYPE) Rereauira Swamp, 17 Sep 1992, G M Barker (NZAC) 37°36', 178°05'
- " 1 ♂ Lottin Pt, Otanga, 27 Apr 1993, ex rotten Litsea on ground, 37°32', 178°10' JS Dugdale (NZAC)
- " ✓ 50 ♂, 1 ♀ Otanga Bush, NZMS 260 Y14 662823, 12 Mar 1993, ex rotten log, 37°33', 178°10' East Cape Insect Survey 1992/3, J W M Marris (Lincoln)
- " ✓ 10 ♂ Rereauira, NZMS 260 Y14 584906, 20 Oct 92, in rotten log on ridge of Nothofagus truncata forest, ECIS 1992/3, J W M Marris (Lincoln) 37°36', 178°05'
- " ✓ 1 ♀ ^{ete} Oreke Forest, Te Puia Hut, 26 Apr 1993, in rotten wood G. Hall (NZAC) 37°35', 177°55' (before Waikou Bay)
- GB ✓ 1 ♀ Kakanui 300m, NZMS 260 Z14 876806, 1 Feb 1993, pit-fall trap Nothofagus forest, ECIS 1992/3, R M Emberson (Lincoln) 37°39', 178°24'
- GB ✓ 1 ♀ Kakanui 300m, NZMS 260 Z14 876806, 16 Mar 1993, Nothofagus forest, reared from pupa ex Kunzia ericoides (col. Feb 1993) ECIS 1992/3, J W M Marris (Lincoln) 37°39', 178°24'

Recorded from BP, GB

Northernmost locality: 37°32', 178°10' Lottin Pt, Otanga, BP
 Southernmost " 37°39', 177°55' Oreke Forest, Te Puia Hut, BP
 + 37°39', 178°24' Kakanui, GB.

From SL to 300m

Adults collected Feb, Mar, April, Sept, October
 Pupa in rotten Kunzia ericoides ~~Feb 93~~ Feb 93; adult em. March '93
 Adults collected in rotten Litsea on ground, rotten logs, + in a pitfall trap.

Etymology: ^(species epithet) The name is latin for unkempt + alludes to the appearance of the elytral vestiture.

Dendroblax earlii White (1) (1)

Dendroblax earlii White 1846

- WI 1♂ ^{40°22' 175°37'} Te Mata Rd, Palmerston Nth, 12 Nov 1959, R M Bull (NZAC)
- TO 1♂ 11♀ ^{35°27' 175°31'} Kariol 2000', ^{600m} 4 Feb 1930, G B Rawlings (NZAC) Det Holloway 1957
- WN 1♂ Tokomaru Gorge, 7 Feb 1960, R M Bull (NZAC) 40°32' 175°33'
- BP 1♂ Te Puke, Nov 1976, Mr White (NZAC) 37°47', 176°20'
- BP 1♂ Otaramarae, L Rotoiti, 27 Dec 1978, J S Dugdale (NZAC) [Has deformed left max palp] 38°05', 176°22'
- WA 1♂ Dannevirke, Dec 1941, [Coll?] (NZAC) 40°12' 176°06'
- CL 1♂ ^{1500' 1450m} Moehau Ranges, ^{under 100'} 9 Nov 1956, J E Watt (NZAC) 36°32' 175°24'
- WO 1♂ Morrinsville, 19 Oct 1971, on pasture [Coll?] (NZAC) 37°39', 175°32'
- TO 1♂ ^{38°42' 176°05'} Taupo, 441, TB Bun Dup Collⁿ (NZAC) Det Holloway 1959
- TK 1♂ ^{39°20' 173°48'} Rahotu, Taranaki, Sept 1946 [Coll?] (NZAC)
- AK 1♂ ^{37°00' 174°52'} Manukau, 20 Dec 1915, 441-antenna, T. B. Bun Dup Coll. (NZAC) Det Holloway 1959 [spec has deep club]
- BP 1♂ ^{37°47' 175°30'} Okauia, Dec 1921, A E Brookes Collⁿ (NZAC) Det Holloway 1959
- AK 1♂ ^{36°59' 175°02'} Clevedon, Auckland, 29 Sep 1967, R J Moloney (NZAC)
- RI 1♂ ^{40°07' 176°14'} Makotuku, 441, Feb 19 9, A E Brookes Collⁿ (NZAC) Det Holloway, 1959
- WO 1♂ ^{37°53' 174°52'} Te Mata, 13 Nov 1951, Ag Dept Hamilton (NZAC)
- TO 1♂ Taupo, 2 Feb 1967, J A Armstrong (NZAC)
- TO 1♂ ^{39°06' 175°39'} Ketetahi, 3 Dec 1938, G B Rawlings (NZAC) Det Holloway [Comp with Type Nov 1957]
- NN 1♂ ^{41°02' 172°07'} Heaphy [Track], [on] beech, 20 Dec 1962, A K Walker (NZAC)
- AK 1♂ ^{37°04' 175°00'} Papakura, 18 Feb 1942, C E Clarke (NZAC) [Comp with Type (BAH) Nov 1957].
- ~~Kariol 2000', 4 Feb 1930, G B Rawlings (NZAC)~~
- TO 1♀ ^{39°03' 175°23'} Oio, 20 Jan 1936, F Gardner (NZAC) Det Holloway 1957
- WO 2♀ ^{38°29' 174°42'} Herangi Ra, Mangakoa Saddle, Sof Marakopa, 303m, 8 Dec 1982, J S. Dugdale + K J. Fox, to MV lamp (NZAC) Fully winged !!
- TK 1♀ ^{39°04' 174°04'} New Plymouth, 1942, J. I. T. Townsend (NZAC)
- WN 1♀ Tokomaru Gorge, 12 Dec 1959, R M Bull (NZAC)
- 2♀ No data, Dom. Mus. Exchange, (NZAC) Det Holloway 1957
- TO 1♀ ^{38°53' 175°16'} Taumarunui, 15 Nov 1932, F. C. Corlett (NZAC)
- RI 1♀ ^{39°25' 175°25'} Ohakune, Main Trunk, 30 Dec 1931, E. Fairburn, 441, [A E Brookes Collⁿ], (NZAC) Det Holloway 1959
- TO 1♀ Ketetahi, 3 Dec 1938, G B Rawlings (NZAC) Det Holloway 1957
- BP 1♀ Okauia, 5 May 1922, A E Brookes Collⁿ (NZAC) Det Holloway 1957
- WO 1♀ ^{38°01' 175°20'} Te Awamutu, em 2 Mar 1984, H Johnstone, reared [at MAF Lynfield] from larva x soil in paddock, 20 Sep 1983. MAF no 14547/134 M (NZAC)

Additional Records from Holloway (1961)

- ND 1♂ ^{35°50' 175°06'} Mokohinau I, NOD (NMNZ)
- AK 1♂ ^{37°09' 175°07'} Papatimu, 9 Nov 1928, A Richardson (AMNZ)
- RI 1♀ Tokomaru Gorge, 20 Nov 1919, M. Harris (AMNZ)
- RI 1♀ " Dec 1928, Coll? (NMNZ)

Dendroblax earli (2)

(2)

Dendroblax earli

- TO ³⁹⁻¹⁴ 10 ♀ Erua, 30 Dec 1940, CE Clarke (AMNZ)
- 10 ♂, 6 ♀ Kariori, Feb 1937, coll? (CMNZ) - Almost certainly Kariori
- TO ³⁹⁻¹⁰ 10 ♀ National Park, 24 Dec 1939, A. Richardson (AMNZ)
- WN ⁴⁰⁻³⁷ 20 ♂, ³⁵⁻¹⁷ 10 ♀ Levin, Nov 1909, ACO'Connor (NMNZ)
- WN ⁴¹⁻¹² 10 ♀ Melling, 31 Oct 1954, R.K. Dell (NMNZ)
- ✓ 10 ♀ " 2 Jan 1958 " " (NMNZ)
- ✓ 10 ♀ " 7 Dec 1958 " " (NMNZ)
- WN ⁴¹⁻⁰⁷ 10 ♀ Taita, 12 Jan 1959, Mr Coleman (NMNZ)
- WN ⁴¹⁻¹⁴ Holotype [sex undet.] Hut River, Port Nicholson, no date Mr Earl (BMNH)
- WN ⁴¹⁻¹⁷ 10 ♂, ¹⁷⁴⁻⁵⁷ 10 ♀ Karori, 11 Dec 1947 JT Salmon (NMNZ)
- NN ⁴¹⁻¹⁷ 10 ♀ Nelson, 1940, E.S. Gourlay (AMNZ)
- NN ⁴¹⁻⁵⁰ 10 ♀ Buller, 7 Dec 1938, JT Salmon (NMNZ)
- BR 4 specs including type of acutangulus Greymouth, no date, Helms (BMNH)
- OL 10 ♂ ⁴⁵⁰¹ 168-37 Ben Lomond, Jan 1923, G. Howes (AMNZ) ALC Δ 1748m
- Specs examined: 26 ♂, 41 ♀, Holotype earli, lectotype acutangulus,
Lectotype + 3 sex indet.
- Specs ex: ~~Holotype~~ earli (sex not det), lectotype + 3 paralectotypes acutangulus (sex not det),
and 69 non type specs (28 males, 41 females).
- BP 20 ♂ ³⁷⁻³⁹ 177-51 Papatea, 30 Oct-23 Nov 1992, G. Hall, Malaise Trap (NZAC)

Dendroblax earli

GB 1 ♀ ³⁷⁴⁰ 17830 Taikawakawa 240m, NZMS 260 Z14 932794, 28 Oct 1992, JWM Marris, reared ex larva from under large log, East Cape Insect Survey 1992/3. (LUNZ)

OK ✓