INVERTEBRATES RECORDED FROM THE NORTHERN MARIANAS ISLANDS
STATUS 2002

O. BOURQUIN, CONSULTANT

COLLECTIONS MANAGER : CNMI INVERTEBRATE COLLECTION
CREES - NORTHERN MARIANAS COLLEGE, SAIPAN
DECEMBER 2002

Phylum: Arthropoda Class: Insecta Order: Hymenoptera Suborder: Apocrita
Superfamily: Apoidea Family: Colletidae

Diversity

Micronesia – 1+ species, Mariana Isl. 1 – species, CNMI - 0 species

Ecological and human significance

Yellow-faced bees are small bees which gather and carry pollen and nectar in their back to their nests to feed their larvae. The nests are made in cavities and crevices.

Conservation

Conservation will entail maintenance of habitats and as little pollution as possible in those habitats, and the elimination or control of alien species.

Identification

There are no keys for in house identification.

Records of colletid bees from CNMI indicating areas (blank spaces) from which records are required.

Bold = endemic to Mariana Islands, Underlined = indigenous to Mariana Islands, Other = introduced , x = literature record, X = specimen in CNMI collection.
Agri = Agrihan , Agui = Aguiguan, Alam = Alamagan , Asun = Asuncion, Urac = Farallon de Pajaros or Uracas, Fara = Farallon de Medinilla, Gugu = Guguan, Paga = Pagan, Rota = Rota, Sari = Sarigan, Saip = Saipan, Tini = Tinian

Species	Islands											
	Rota	Agui	Tini	Saip	Fara	Anat	Sari	Gugu	Alam	Paga	Agri	Asun	Maug	Urac
Hylaeus spp	x													

Species list

Saipan 1945 = literature record for Saipan, seen/found 1945, CNMI 2000 = in Commonwealth of Northern Mariana Islands, housed at the Northern Marianas College collection, Saipan, collected during 2000, or CNMI 1971-2000 where the dates indicate earliest and latest years of specimens collected. n.d. = no date given in reference.

Subfamily: Hylaeinae

Hylaeus guamensis (Cockerell) Guam 1936. Three species of *Hylaeus* are known from Rota and Guam respectively (Townes 1946).

References

Cockerell, T.D.A. 1942 . Bees of Guam. Pp.188-190. In: Insects of Guam – I, Bernice P. Bishop Museum – Bulletin 172. Honolulu, Hawaii.

Phylum: Arthropoda Class: Insecta Order: Hymenoptera Suborder: Apocrita
Superfamily: Apoidea Family: Halictidae

Diversity

Micronesia – 5+ species, Mariana Isl. – 5 species, CNMI - 4 species

Ecological and human significance

Halictid bees are small to moderately sized bees, mostly nesting in burrows in the ground. Some species are important pollinators, a few are parasites of other bees.

Conservation

Conservation will entail maintenance of habitats and as little pollution as possible in those habitats, and the elimination or control of alien species.

Identification

There are no keys for in house identification.

Records of halictid bees from CNMI indicating areas (blank spaces) from which records are required.

Bold = endemic to Mariana Islands, Underlined = indigenous to Mariana Islands, Other = introduced , x = literature record, X = specimen in CNMI collection.
Agri = Agrihan , Agui = Aguiguan, Alam = Alamagan , Asun = Asuncion, Urac = Farallon de Pajaros or Uracas, Fara = Farallon de Medinilla, Gugu = Guguan, Paga = Pagan, Rota = Rota, Sari = Sarigan, Saip = Saipan, Tini = Tinian

Species	Islands												
	Rota	Agui	Tini	Saip	Fara	Anat	Sari	Gugu	Alam	Paga	Agri	Asun	Maug	Urac
Halictus rotaensis var hornbosteli	x													
Halictus swezeyi	x													
Homalictus vextor									x		x	x		
Lasioglossum sp	x													
Halictus sp.				X										

Species list

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Halictus rotaensis var. hornbosteli Cockerell Rota 1925
Halictus saffordi Cockerell Guam 1936
Halictus swezeyi Cockerell Rota 1925, Guam 1936
Halictus sp. Saipan CNMI 2002
Homalictus vextor (Krombein) Agrihan 1992, Guguan 1992, Pagan 1992
Lasioglossum sp (new) Rota 1992

References

Cockerell, T. D. A. 1942. Halictine bees from Rota Island. Pp. 191-194 In: Insects of Guam I, Bulletin 172, Bernice P. Bishop Museum, Honolulu, Hawaii. 218 pp.
Cockerell, T.D.A. 1942 . Bees of Guam. Pp.188-190. In: Insects of Guam – I, Bernice P. Bishop Museum – Bulletin 172. Honolulu, Hawaii.. 218 pp.

Miyano, S. 1994. Insects of the Northern Mariana Islands, Micronesia, collected during the expedition. Nat. Hist. Res., Special Issue No. 1: 199-215

Phylum: Arthropoda Class: Insecta Order: Hymenoptera Suborder: Apocrita
Superfamily: Apoidea Family: Megachilidae

Diversity

Micronesia – 7+ species, Mariana Isl. – 7 species, CNMI - 5 species

Ecological and human significance

Leafcutting bees make nests either in holes in the ground, or more commonly in some natural cavity, frequently in wood. Many species line their nests with pieces cut from leaves. Some of the species are pollen gatherers, others are parasitic.

Conservation

Conservation will entail maintenance of habitats and as little pollution as possible in those habitats, and the elimination or control of alien species.

Identification

There are no keys for in house identification.

Records of leafcutting bees from CNMI indicating areas (blank spaces) from which records are required.

Bold = endemic to Mariana Islands, Underlined = indigenous to Mariana Islands, Other = introduced , x = literature record, X = specimen in CNMI collection.. Agri = Agrihan , Agui = Aguiguan, Alam = Alamagan , Asun = Asuncion, Urac = Farallon de Pajaros or Uracas, Fara = Farallon de Medinilla, Gugu = Guguan, Paga = Pagan, Rota = Rota, Sari = Sarigan, Saip = Saipan, Tini = Tinian

Species	Islands												
	Rota	Agui	Tini	Saip	Fara	Anat	Sari	Gugu	Alam	Paga	Agri	Asun	Maug	Urac
Lithurge scabrous								x					x	
Megachile fullawayi						x						x	x	
Megachile laticeps	X		X		X	X			x	x	X			
Megachile schawinslandi				X										
Pachodynerus nasidens				X		X				X				

Species list

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Lithurge guamensis Cockerell Guam
Lithurge scabrous (Smith) Guguan, Maug 1992
Megachile fullawayi Cockerell Agrihan, Anatahan, Maug 1992
Megachile laticeps Smith Saipan CNMI 1968, Agrigan 1992, CNMI 1971, Sarigan CNMI 2001, Tinian CNMI 2000, Anatahan CNMI 2002, Alamagan, Pagan 1992, Aguiguan CNMI 2002, Guam (Guam coll)
Megachile schawinslandi Alfken Saipan CNMI 1971-1979, Guam (Guam coll)
Megachile scabrosus (Smith) Guam (Guam coll)
Megachile sp. Ahatahan CNMI 2002
Pachodynerus nasidens Latr. Saipan CNMI 1970-1971, Anatahan CNMI 2002, Pagan CNMI 1971, Guam 1936

References

Miyano, S. 1994. Insects of the Northern Mariana Islands, Micronesia, collected during the expedition. Nat. Hist. Res., Special Issue No. 1: 199-215
Swezey, O.H. 1942 . Wasps of Guam. Pp.184-187. In: Insects of Guam – I, Bernice P. Bishop

Museum – Bulletin 172.

Phylum: Arthropoda Class: Insecta Order: Hymenoptera Suborder: Apocrita
Superfamily: Apoidea Family: Anthophoridae

Diversity
Micronesia – 2 species, Mariana Isl. – 2 species, CNMI - 2 species

Ecological and human significance
Carpenter bees in the CNMI are large, robust bees (about 25 mm long) which excavate nests in solid wood, and are pollen and nectar feeders.

Conservation
Conservation will entail maintenance of habitats and as little pollution as possible in those habitats, and the elimination or control of alien species.

Identification
There are no keys for in house identification.

Records of carpenter bees from CNMI indicating areas (blank spaces) from which records are required.

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Species	Islands												
	Rota	Agui	Tini	Saip	Fara	Anat	Sari	Gugu	Alam	Paga	Agri	Asun	Maug	Urac
Xylocopa sonorina		X		X										
Xylocopa brasilianorum varipuncta				x										

Species list

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Subfamily: Xylocopinae
Xylocopa sonorina Smith Carpenter bee Saipan CNMI 1970-1981, Tinian CNMI 2002, Guam (Guam coll)
Xylocopa brasilianorum varipuncta Patton Saipan 1992

References

Miyano, S. 1994. Insects of the Northern Mariana Islands, Micronesia, collected during the expedition. Nat. Hist. Res., Special Issue No. 1: 199-215

Phylum: Arthropoda Class: Insecta Order: Hymenoptera Suborder: Apocrita
Superfamily: Apoidea Family: Apidae

Diversity

Micronesia – 1 species, Mariana Isl. – 1 species, CNMI - 1 species

Ecological and human significance

Honey bees are social insects which are extremely important as pollinators, and as producers of honey.

Conservation

Conservation will entail maintenance of habitats containing pollen and necter-bearing flowers, and as little pollution as possible in those habitats. Although these insects were introduced to the CNMI, their usefulness both ecologically and to man is such as to encourage their continued existence.

Identification

There no are keys for in house identification.

Records of from CNMI indicating areas (blank spaces) from which records are required.

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Agri = Agrihan , Agui = Aguiguan, Alam = Alamagan , Asun = Asuncion, Urac = Farallon de Pajaros or Uracas, Fara = Farallon de Medinilla, Gugu = Guguan, Paga = Pagan, Rota = Rota, Sari = Sarigan, Saip = Saipan, Tini = Tinian

Species	Islands												
	Rota	Agui	Tini	Saip	Fara	Anat	Sari	Gugu	Alam	Paga	Agri	Asun	Maug	Urac
Apis mellifera	X		X	X						X				

Species list

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Subfamily: Apinae

Apis mellifera L. Honey bee Saipan CNMI 1970-2000, Pagan CNMI 1971-1999, Rota 1992, CNMI 1971, Tinian CNMI 2002, Guam 1936 (introduced to Guam in 1907)

References

Cockerell, T.D.A. 1942 . Bees of Guam. Pp.188-190. In: Insects of Guam – I, Bernice P. Bishop Museum – Bulletin 172. Honolulu, Hawaii.. 218 pp.

Miyano, S. 1994. Insects of the Northern Mariana Islands, Micronesia, collected during the expedition. Nat. Hist. Res., Special Issue No. 1: 199-215