Puka Whakamārama o te Pepe Nui

Te Taurapa

Te Rūnanga o **NGĀI TAHU**

orokonui ecosanctuary

Dunedin City Council

Otago Museum

Manaaki Whenua Landcare Research

Te Takeka mai o te Pepe

I piki ake a Tāne, te Ātua o te kahere, ki kā Raki Tūhāhā, kia toro atu ki tōhona tuakana a Rēhua. Nā Rēhua he ahi tunu kai, he hue hoki i tono. Ko tā Tāne, 'He aha tā tāua kai e te tuakana?' Ka rūrūa e Rēhua tōhona upoko kia taka atu kia rua kā kōkō i ōhona makawe. Tūmeke atu a Tāne, kihai ia i te piraki kai i kā manu tapu nō te upoko o tōhona tuakana. Ka uia ké e ia, 'Me whakahoki ēnei manu ki a Papatūānuku?' I whakaae a Rēhua, ā, ko tā Rēhua ka noho kā manu ki kā rākau, ka kai i kā hua o te kahere. I a Rēhua e rūrū ana i tōhona upoko i puta atu hoki ētahi atu 'manu' o Rēhua, arā a Pepe, a Tātarakihi, a Pihareika, a Kēkerewai. Ko ēnei pēpeke ko tapaina ko 'Kā Manu a Rēhua', ā, he manu e puta mai i te raumati.

Kā Whetū

Ko te kōrero o pepe ko kawea e te kāhui whetū o Rēhua te mātāmua o Raki rāua ko Papa. Ko ia te whetū whero, te ariki o kā whetū.

Wairua Takata

Ko ō te whakaaro Māori ko te wairua o rātou ko wehe ki te pō, ko hoki mai ki te ao marama hai pepe.

He mea whakahirahira te pepe ki te rereka rauropi (biodiversity) o Aotearoa

He whānau rahi te **Lepidoptera**, arā ko kā pepe me kā pūrerehua. Ko rātou te tuatoru o kā pēpeke katoa i Aotearoa. 1750 nui ake kā momo pepe kua tapaina. E ai ki kā kaipūtaiao kia 300 anō kāore anō kia huraina.

He motubake te Pepe

86% o kā pepe i Aotearoa he mea taketake (endemic). Nō konei ake, mā tātou e tiaki.

He aha i hira ai te pepe?

He wāhi nui ki kā pepe ki te **rauropi (ecosystem)** ko rātou te pū o te **tukutuku** kai matatini. He **kaiota (herbivore)** te anuhe i kā otaota taketake.

He **whakaaiai (pollinator)** whakahirahira te pepe. He nui nei kā otaota taketake ka whakaaiaitia e te pepe. Ka mahi tēnei mahi nui i te pō i a te marea e moe ana, nā reira ka whakarapaina e tātou te mahi rakatira o te pepe. He tino kai te pepe mā kā pēpeke me kā manu taketake. Heoi anō hē kai mātua hoki ki kā riha rāwaho pērā i te kiore ītiiti me te kiore.

He riha hoki te pepe

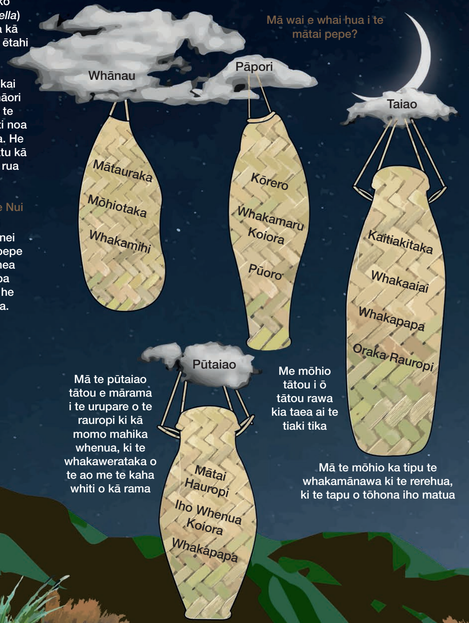
Ko Hihue (te Pepe Kūmara, *Agrius convolvuli*) tētahi riha nui i kā māra kūmara. He nui hoki kā whakataukī mō te āwhato me te nui o tāna mahi kai.

He riha rāwaho nō inātata nei ko te pepe codling (*Cydia pomonella*) i kawea mai i Ūropi, ā, ka kaika kā āporo, kā pea, kā wōronati me ētahi atu hua rākau.

He maniheko te pepe i tāhana kai i kā pūeru ko tuia i te whītau māori pērā i te wūru, i te mōhenu me te huruhuru. Me te mea nei tokoiti noa kā momo pepe e kai pūeru ana. He māmā te whakatika, me tuku atu kā pūeru ki te pātaka makariri kia rua pea kā wā.

Puka Whakamārama o te Pepe Nui

Ko kā pepe nui, kā pepe māori anake nō tēnei wāhi taiao ki tēnei pānui. Ki te kitea e koe tētahi pepe kāore i roto i te pānui nei, he mea puiaki pea, he mea noho hōrapa pea ehara nō tēnei wāhi taiao, he pepe ririki pea, he mea hou pea.



Me hopu te pepe?

Ka puta te pepe i te pō nā reira kāore te nuika e mōhio ana e hia, kai te aha rānei kā pepe. Me te whakarapa tonu, ekari me kohi kā pepe kia tūtohu.

Te hua o te rarauka aroka whānui?

Mā te whakamahi i te momo mahaka kotahi (arā te Mahaka Pepe Heath) ka inehia kā rarauka i ahu mai i kā wāhi katoa, i te hurika wā hoki. Mā te rarauka aroka whānui ka tiakina tahi ai tātou te pepe. Mehemea ka heke kā nama ka tere kitea e mātou, ā, ka whakatauria rautaki kia maimoatia ai kā pepe.

He aha te hua o te rarauka whakatauine?

Mā te tātai i ia pepe o tētahi momo pepe ka kohi pāroko anō atu i te rāraki ikoa noa. Ko tēnei pāroko, ko te rarauka whakatauine. Mā te huhua o te pāroko ka kitea he panonitaka i te wā, i te wāhi rānei.

He aha me mātai ai kā pepe?

He kākara māpua te pepe. He nui kā momo pepe e whai mahi ana, e whai wāhi ana i te rauropi. He honoka anō tō te pepe ki ērā atu momo koiora (arā, otaota, manu, momo riha rāwaho, ērā atu pēpeke).

Mēnā he panonitaka i te rauropi ko kā pepe tētahi o kā koiara tuatahi ka rakona te kātoitoi. He tohu pai o te panonitaka ki tō rātou rauropi.

Kuputaka

Lepidoptera: Pepe, Pūrerehua
Taketake/Endemic: Nō tērā wāhi ake
Rauropi/Ecosystem: Ko te taiao me ōhona āhuataka katoa
Tukutuku kai: Ka kai a wai i a wai
Kaiota: Kararehe kai otaota anake
Huna/Nocturnal: Ka mahi i te pō
Hapori/Community: Kā momo koiora nō tētahi takiwā

1. He momo pepe hou ka whakaāhuaria i Hoare, R.J.B. e whakatā ana. *Noctuaine* (Insecta: Lepidoptera: Noctuidae) 1: *Austramathes, Cosmodes, Proteuxoa, Physetica*. Ao kararehe Aotearoa. Kāore anō kia tapaina i tēnei pānui

2. He uaua te tautohu i te *Wiseana mimica*, *W. jocosa*, *W. cervinata* me te *W. fuliginea* mai i te *W. copularis* nō te whakaāhua noa; tirohia 'Hepialidae' nā J.S. Dugdale (vol. 30 of *Fauna of New Zealand*) kia tika tō tautohu, kia kitea hoki he kōrero.

3. He uaua te tautohu i te momo *Aoraia* nō te whakaāhua noa; tirohia 'Hepialidae' nā J.S. Dugdale (vol. 30 of *Fauna of New Zealand*) kia tika tō tautohu.

4. Ka noho hoki a *Physetica funerea* i tēnei takiwā ekari kia wehewehe atu i *P. cucullina* me āta titiro te pūhihi o te toa.

Mā raro nei he wāhi āwhina anō

www.landcareresearch.co.nz/mothnet
Email: MothNetOtago@gmail.com

@MothNetNZ

MothNetNZ
www.naturewatch.org.nz/
Entomological Society of New Zealand:
www.ento.org.nz

Kā mihi

Kā tuhika, te kiko me te haka o te pānui nā Dr Barbara J Anderson, rātou ko Komene Cassidy, ko Victoria Campbell, ko Dr Robert Hoare, ko Tiahuia Kawe-Small, ko Tahu MacKenzie, ko Dr Ralf Ohlemüller, ko Tangiwai Rewi, ko Dr Priscilla Wehi, ko Emma Burns. Nā Sean W Gilles kā whakaahua. I kohia e Dr Robert Hoare, rātou ko Brian Patrick, ko te hapori pepe o Aotearoa te rāraki pepe. Nā Birgit Rhode kā whakaāhua mai i kā taura i te NZAC, nā te pūtea tautoko mai i Terrestrial Freshwater Biodiversity Information System (TFBIS).

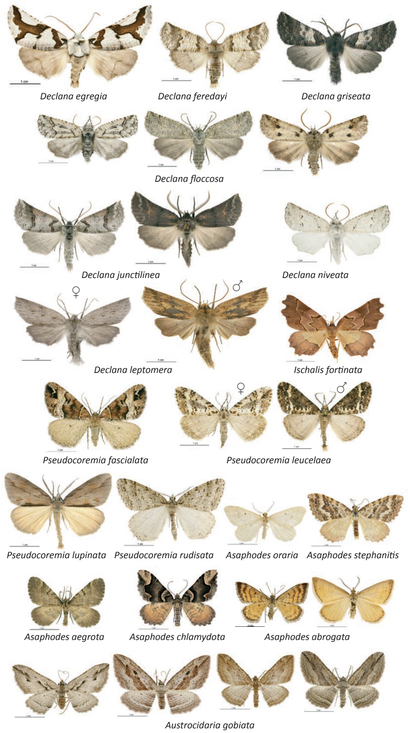
I huatia mai te pānui nei e Manaaki Whenua i te kaupapa, Ahi Pepe MothNet. Nā MBIE *He Hihiri i Te Mahara* me *Ngā Koiora Tuku Iho* te pūtea tautoko.

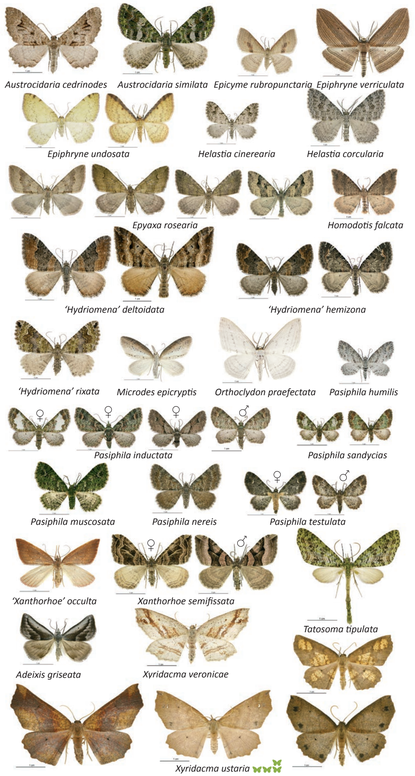
ISBN: 978-0-947525-21-7 (2017)

This work is licensed creative commons Attribution-nonCommercial-NoDerivs 3.0 new Zealand. To view details of this license go to www.creativecommons.org/licenses/by-nc-nd/3.0/nz/

Ka hou ki te whenua, he tūkoukou; ka puta ki te raki he pepe | *Te āwheto kai paeka* | *Me te upoko tūkoukou* | *I hikaina te ahi titi, engari i whakapoapoa kē i te pepe* – Te Whiti o Rongomai | *He iti hoki te mokoroa, nāna i kakatī te Kahikatea*

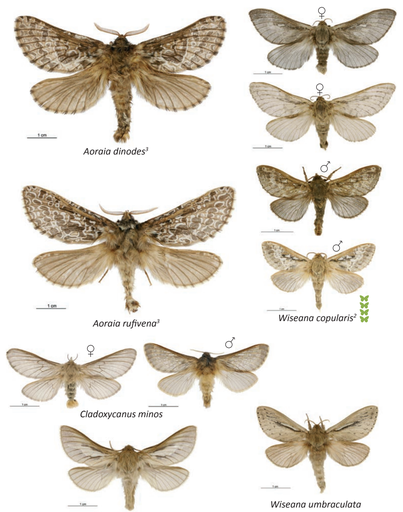
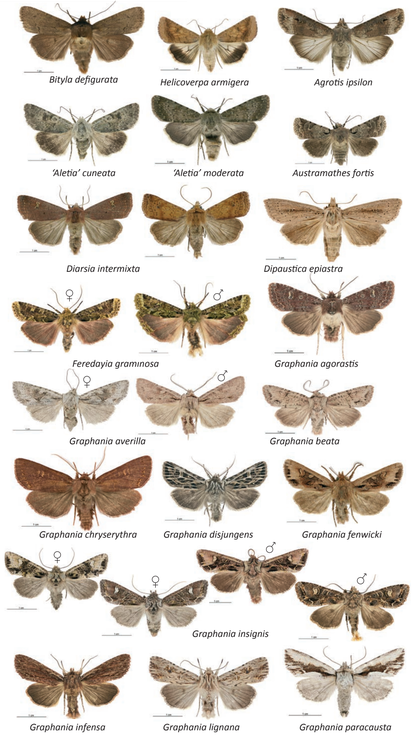
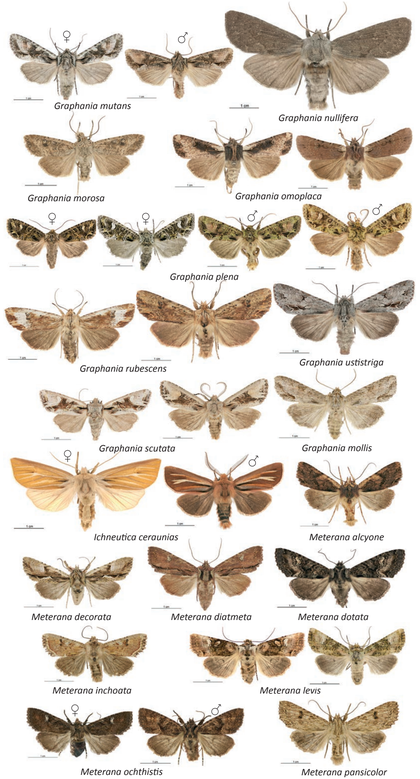
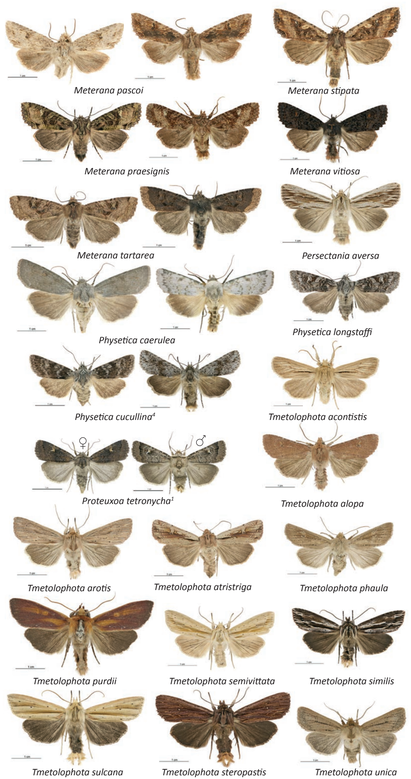
Geometridae





Erebidae

Hepialidae



Noctuidae