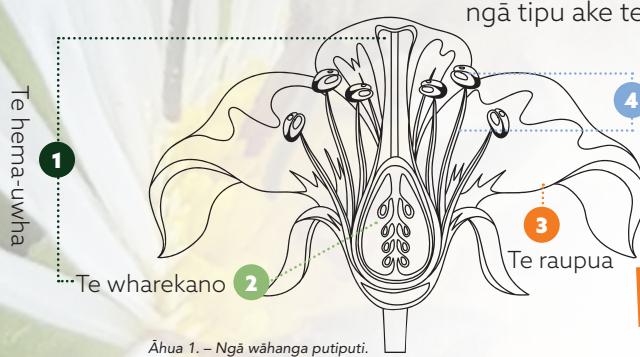


# HE KŌRERO MŌ TE HAENGA



Photo: Cryn Russell



Āhua 1. – Ngā wāhanga putiputi.

## He aha ngā pua e rerehua nei, e reka hoki nei te kakara?

He hononga motuhake tō ngā kaituku hae me ngā tipu. Ka āwhina ngā kaituku hae i ngā tipu ki te whakaputa uri, ā, ka tukuna e ngā tipu te kai pērā i te hae, i te waihonga hoki mā ngā kaituku hae.

Ka whakamanea mai ngā pua i ngā kaituku hae mā ō rātou tae,

ō rātou āhua, ō rātou kakara hei āki i ngā kararehe kia toro mai, kia hae i a rātou. He maha ngā kararehe ka toro atu ki ngā pua mō te waihonga āwenewene, mō te hae taiora rānei. He pūtake pai te waihonga, te hae anō hoki hei kai mā ngā kaituku hae.

## Papakupu:

**Parāoa pī:** he ranunga o te hae me te mīere.

**Torongū:** te āhua kūao o te pī mīere me ētahi atu ngārara.

**Waihonga:** he wē huka ka whakaputaina e ngā pua hei whakamanea mai i ngā kaituku hae. Ka whakahokia e ngā pī mīere ki tō rātou whare mīere hei mahi mīere.

**Wharekano:** ko te wāhi o te hema-uwha i reira hangaia ai ngā kākano.

**Hema-uwha:** te wāhanga uwha o te pua

**He wāhanga te haenga** o te huringa o ngā tipu whai pua. Ko ngā tipu whai pua katoa ka whakaputa uri (ka hanga i ngā tipu hou) mā te hanga kākano ki roto i te **wharekano** o te pua. Ka tipu ēnei kākano hei tipu hou.

Kei roto i ngā pua ngā taihema toa me ngā taihema uwha hoki/rānei. Ka hangaia te kākano e ngā tipu whai pua ina puta atu te **hae** i te **hema-toa** (te taihema toa) ki te **hema-uwha** (te taihema uwha) o te tipu. Tē taea e ngā tipu ake te neke i te hae. E matea

ana te āwhina a ngā **kaituku hae**, a te hau, a te wai rānei.

Ko ngā kaituku hae ko ngā kararehe, inarā ko ngā ngārara, ko ngā manu hoki, ka tiki ake i te hae mai i te hema-toa o tētahi pua me te kawe ake ki te hema-uwha o tētahi atu pua. I ētahi wā ka kawea atu ki tētahi pua i te tipu kotahi, i ētahi wā ka mauria ki tētahi atu tipu. E kīa ana tēnei ko te haenga. Tē taea e te nuinga o ngā tipu whai pua te whakaputa kākano horekau te āwhina a tētahi kaituku hae.

**Ko te purūpere tētahi noa iho o ngā hua kāore i konei ki te kore ngā pī.**



Photo: Wikimedia Commons

## He aha tātou e mate nei ki te pī mīere?

He maha ngā huarākau, ngā huawhenua hoki e kaingia nei e tātou ka ahu mai i ngā tipu kāore he taketake ki Aotearoa nei. I kōkuhutia mai ki Aotearoa i ētahi atu whenua (hei tauira, ngā āporo, ngā purūpere, ngā pea). I kōkuhutia hoki te korowa hei whāngai atu i ngā kararehe pāmu. Ko te wero kia rawaka ai ngā kaituku



Photo: Wikimedia Commons

**▲ I kōkuhutia ngā pī mīere ki Aotearoa hei āwhina ki te tuku hae ki te korowa hei kai mā ngā kararehe pāmu.**

hae mō ēnei huanga kai hei whakaputa i ngā kākano rawaka, nā reira i kōkuhutia te pī mīere kua whakaratangia, me te pīrorohū nō Uropi. He iti rawa ngā pī māori, kāore rānei i rawaka ki te whakaputa i ngā huanga kai nui.

Ki te kore te haenga a te pī mīere karekau: ngā āporo, ngā aperekoti, ngā purūpere, ngā netarāni, ngā paukena, ngā tiere, ngā pea, ngā kūkama... haere ake nei te rārangi.



i reira kitea ai te wharekano.

**Hae:** he kano riki ka whakaputaina e te wāhanga toa o te pua. Ka whakawhitia atu ērā ki te wāhanga uwha o te pua hei whakatō i te hua ki te wharekano

**Kete hae:** te wāhanga o te waewae o muri o te pī i reira kawea ai te hae mō te hokinga atu ki te whare mīere.

**Kaituku hae:** he kararehe ka neke i te hae mai i te wāhanga toa o tētahi pua ki te wāhanga uwha o tētahi pua ki te tipu kotahi, ki tētahi atu tipu rānei.

**Hema-toa:** ko te wāhanga toa o te pua i reira whakaputaina ai te hae.

**Ko te kanikani takahuri:** ko te kanikani a ngā pī i roto i te whare mīere hei whakaatu i ētahi atu pī te wāhi e kitea ai te waihonga.

**Pī kaimahi:** he pī uwha ka kohi waihonga ai hei hanga i te mīere, i te hae hoki mō te whare mīere. E hia tini ngā pī mahi kei ia kōhangā pī.

# KO TĀ TE PĪ HAE I NGĀ PUA

## MAHI TUATAHI: TĪKINA MAI

**I te nuinga o te wā ka rere ngā pī kaimahi** tae noa atu ki te toru kiromita atu i tō rātou whare mīere ki te kimi kai. I ūnā wā kua tekau kiromita te roa o te rere i te rerenga kotahi mēnā he uua te kite i ngā pua pai.

Ka whakamaneatia mai ngā pī ki ngā pua i runga i te waihonga, i te hae anō hoki. Ka kohi tōtika ngā pī i te hae, ka taka rānei te hae ki ūrātou tinana i te wā e kohi waihonga ana. Ina korikori ngā pī ki te rapu i te waihonga ka pā tōna tinana ki te **hae**.

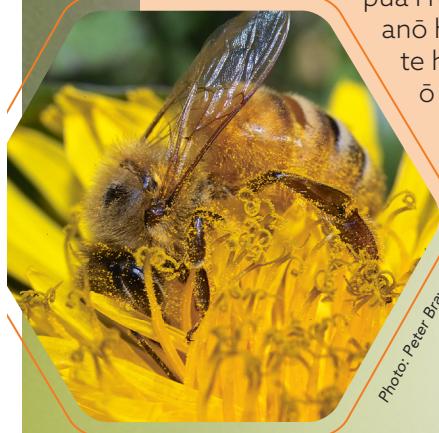


Photo: Peter Bray.

▲ He pī kua kapi i te hae tawao.

### Ētahi atu kaituku hae

- NGĀ PĪ MĀORI
- NGĀ PIROROHU
- NGĀ PŪREREHUA
- NGĀ PŪREHUREHU
- NGĀ PEKA
- NGĀ PĀPĀ
- ā, ko te HAU ANŌ HOKI

Mātakina tētahi ataata mō te haenga ki konei:  
<https://www.youtube.com/watch?v=tXv2k7OoY7U&t=64s>

Ka whakahokia e ngā pī te hae ki te whare mīere ki ngā "kōpaki hae" ki ngā waewae o mua. He rereke ngā tae o te hae ka whakaputaina e ngā pua rerekē.



Photo: Ilona Hart.

## MAHI TUARUA: HORAHIA

Ka rere te pī ki tētahi atu pua o te tipu kotahi, ki tētahi atu tipu rānei, ka murua ētahi hae ki te **hema-uwha** o te pua whai muri. Ka whakatōngia ngā hua o te **wharekano** e te hae, ā, ka whakaputaina ngā kākano, ngā hua hoki. Ka kohi ngā pī mīere i te hae tāpiri, ka whakatakoto ai ki tētahi **kete hae** ki te waewae muri hei whakahoki atu ki te whare mīere.

He maha ngā kararehe ka tuku hae ki ngā pua tae atu ki tēnei korimako ▼ i runga harakeke.



## MAHI TUATORU: WHAKAPUTUHIA

Kohi ai ngā pī mīere i te waihonga, i te hae hoki mā tō rātou whare mīere. He nui te pūmua i roto i te hae, ā, he pai hei pūtake kai mā ngā **torongū**. Ka whakaputu ngā pī i te hae ki ngā wāhanga honikoma, ka mahia ai hei **'parāoa pī'** hei whāngai atu i ngā torongū.



Ka whakaputuhia te hae e ngā pī mīere ki ngā rua honikoma hei hanga i te "parāoa pī" mā ngā pī e tipu ana.

Photo: Hamish Pulley.



## MAHI TUAWHĀ: KŌREROTIA ATU

Kia hoki rātou ki te whare mīere, ka kōrero ngā pī tētahi ki tētahi mō ngā wāhi tino pai hei kite i ngā pua whai waihonga, whai hae anō hoki, mā te **kanikani takahuri**.

Ka taea e koe te ako tonu mō te kanikani takahuri ki konei: <https://youtu.be/LOZrNs22FAU>.

## Kia pēnei tō āwhinā i nga pī, i ērā atu kaituku hae hoki:

1. Whakatōngia ngā tipu e pai ana ki ngā pī, inarā ko ērā ka puāwai i te Kōanga, i te Hōtoke, i te wā kāore i te tino nui ngā tipu whai pua hei torotoro mā ngā pī. He pai katoa ki te pī ngā rohimere, harakeke me ngā putirā.
2. Me whakarato he wai pai mā ngā pī. Me rau ētahi kōhatu, rākau rānei ki te wai hei tūnga mō ngā pī.
3. Me pātai ki ō mātua kia kaua e whakamahia ngā patukīrea i rō māra ina pua ana ngā tipu.
4. Me marohi atu ki ō mātua kia kaua e tapahia te pātītī mō tētahi wā kia pai ai te pua o te korowa.

Ako atu anō mō ētahi atu kaituku hae ki konei: <https://www.epa.govt.nz/assets/Uploads/Documents/Everyday-Environment/Publications/Pollinator-factsheets-and-activity-sheets/Meet-our-pollinators-activity-sheet.pdf>