

Table S3 ITS2 molecular identification of honeybee pollen pellets collected in Hokkaido, northern Japan

| No. ^a | Identified plant | Species in a monophyletic group with a pollen pellet in the phylogenetic tree ^b | |
|------------------|---------------------------------|--|--|
| | | Distributed in study area | Not reported in study area |
| 1 | <i>Actinidia polygama</i> | <i>Actinidia polygama</i> | — |
| 2 | <i>Angelica</i> sp. | — | <i>Angelica dahurica</i> var. <i>formosana</i> |
| 3 | <i>Artemisia montana</i> | <i>Artemisia montana</i> | <i>Artemisia stelleriana</i> |
| 4 | <i>Asparagus officinalis</i> | <i>Asparagus officinalis</i> | — |
| 5 | <i>Chelidonium majus</i> | <i>Chelidonium majus</i> | — |
| 6 | <i>Chenopodium</i> sp. | <i>Chenopodium album</i> , <i>Chenopodium murale</i> | <i>Chenopodium acuminatum</i> subsp. <i>virgatum</i> , <i>Chenopodium berlandieri</i> , <i>Chenopodium giganteum</i> , <i>Chenopodium gigantospermum</i> var. <i>standleyanum</i> , <i>Chenopodium opulifolium</i> , <i>Chenopodium novopokrovskyanum</i> |
| 7 | <i>Cirsium vulgare</i> | <i>Cirsium vulgare</i> | <i>Cirsium muticum</i> |
| 9 | <i>Cucurbita maxima</i> | <i>Cucurbita maxima</i> | — |
| 12 | <i>Filipendula camtschatica</i> | <i>Filipendula camtschatica</i> | — |
| 13 | <i>Hydrangea paniculata</i> | <i>Hydrangea paniculata</i> | — |
| 15 | <i>Hypochaeris radicata</i> | <i>Hypochaeris radicata</i> | <i>Agoseris elata</i> , <i>Taraxacum alpinum</i> |
| 16 | <i>Kalopanax septemlobus</i> | <i>Kalopanax septemlobus</i> | — |
| 19 | Senecioneae | | <i>Cremanthodium humile</i> , <i>Parasenecio adenostyloides</i> , <i>Parasenecio firmus</i> , <i>Parasenecio subglaber</i> , <i>Syneilesis palmata</i> |
| 20 | <i>Plantago lanceolata</i> | <i>Plantago lanceolata</i> | <i>Plantago lagopus</i> , <i>Plantago leiopetala</i> |
| 21 | <i>Plantago</i> sp. | <i>Plantago asiatica</i> , <i>Plantago major</i> | <i>Plantago cornuti</i> , <i>Plantago erosa</i> , <i>Plantago hostifolia</i> , <i>Plantago uniglumis</i> |
| 22 | <i>Rudbeckia laciniata</i> | <i>Rudbeckia laciniata</i> | — |
| 23 | <i>Sagittaria trifolia</i> | <i>Sagittaria trifolia</i> | — |
| 24 | <i>Sinapis alba</i> | <i>Sinapis alba</i> | — |
| 25 | <i>Solanum nigrum</i> | <i>Solanum nigrum</i> | <i>Solanum americanum</i> , <i>Solanum clavatum</i> , <i>Solanum physalifolium</i> |
| 26 | <i>Solidago gigantea</i> | <i>Solidago gigantea</i> | — |
| 27 | <i>Solidago virgaurea</i> | <i>Solidago virgaurea</i> | — |
| 28 | <i>Tilia</i> sp. | <i>Tilia japonica</i> , <i>Tilia maximowicziana</i> , <i>Tilia miqueliana</i> | <i>Tilia koreana</i> , <i>Tilia oliveri</i> , <i>Tilia tuan</i> |
| 29 | <i>Trifolium pratense</i> | <i>Trifolium pratense</i> | <i>Trifolium caudatum</i> , <i>Trifolium cherleri</i> |
| 30 | <i>Trifolium repens</i> | <i>Trifolium repens</i> | — |

^a Pollen pellets No. 8, 10, 11, 14, 17, 18, and 31 showed no amplification in PCR.

^b Subclade(s) within a monophyletic group were excluded. Floral and phenological information was confirmed by reference to the literature (Ohashi et al. 2015, 2016a, 2016b, 2017a, 2017b; Shimizu 2003).