**Supplementary Table S1** Sample ID, locations, and collectors of honey and bee individuals of *Apis mellifera* and *Apis cerana javana* from Java, Indonesia.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Colony ID** | **Sample ID** | **Location** | **Coordinate** | **Collector** |
| 1 | Am1\_Bdw | H\_Am1\_Bdw | Bondowoso, East Java | 8° 0' 52.3152'' S 114° 0' 5.976'' E | WH,HT,AR |
| 2 |  | B\_Am1\_Bdw1 |
| 3 |  | B\_Am1\_Bdw2 |
| 4 | Am2\_Bdw | H\_Am2\_Bdw |
| 5 |  | B\_Am2\_Bdw1 |
| 6 |  | B\_Am2\_Bdw2 |
| 7 | Am1\_Btl | H\_Am1\_Btl | Bantul, Yogyakarta | 7° 49' 49.5156'' S 110° 30' 12.78'' E | DK,KY |
| 8 |  | B\_Am1\_Btl1 |
| 9 |  | B\_Am1\_Btl2 |
| 10 | Am2\_Btl | H\_Am2\_Btl |
| 11 |  | B\_Am2\_Btl1 |
| 12 |  | B\_Am2\_Btl2 |
| 13 | Ac1\_Bgr | H\_Ac1\_Bgr | Bogor, West Java | 6° 25' 46.6068'' S  106° 31' 36.5052'' E | OY |
| 14 |  | B\_Ac1\_Bgr1 |
| 15 | Ac1\_Pti | H\_Ac1\_Pti | Pati, Central Java | 6° 41' 52.6524''S  111° 0'9.7236'' E | AD,RF,SH |
| 16 |  | B\_Ac1\_Pti1 |
| 17 |  | B\_Ac1\_Pti2 |
| 18 | Ac2\_Pti | H\_Ac2\_Pti |
| 19 |  | B\_Ac2\_Pti1 |
| 20 |  | B\_Ac2\_Pti2 |
| 21 | Ac1\_GKd | H\_Ac1\_GKd | Gunung Kidul, Yogyakarta | 7° 51' 51.9084'' S  110° 36' 52.1712'' E | HP,AV,WS |
| 22 |  | B\_Ac1\_GKd1 |
| 23 |  | B\_Ac1\_GKd2 |
| 24 | Ac2\_GKd | H\_Ac2\_GKd |
| 25 |  | B\_Ac2\_GKd1 |
| 26 |  | B\_Ac2\_GKd2 |
| 27 | Ac1\_Btl | H\_Ac1\_Btl | Bantul, Yogyakarta | 7° 57' 34.8912'' S  110° 23'29.2236'' E | HP, AV,HY |
| 28 |  | B\_Ac1\_Btl1 |
| 29 |  | B\_Ac1\_Btl2 |
| 30 | Ac2\_Btl | H\_Ac2\_Btl |
| 31 |  | B\_Ac2\_Btl1 |
| 32 |  | B\_Ac2\_Btl2 |

H=Honey, B= Bee, Am=*A.mellifera,* Ac=*A.cerana*. Location: Btl=Bantul, Bgr=Bogor, Bdw=Bondowoso, GKd=Gunung Kidul, Pti=Pati, Collector: AD=Abdullah, AR=Abdul Razak, AS=Adi Surahman, AV=Afiannisa Viersanova, DK=Dianita Kusumawadhani Kartika, HP=Hari Purwanto, HT=Hartono, HY=Hartoyo, KY=Kariyono, NR= Nisfia Rahmatun, NI=Nurul Insani, OY=Oyib, RF=Rif’an Fakhri Bahtiarsyah, SH=Saekhon Hasan, SM=Suminta, TV=Tia Vina, WH=WasisHandoko, WS=Wasito.