Contributions to Zoology

Lineage diversity, morphological and genetic divergence in Daphnia magna (Crustacea) among Chinese lakes at different altitudes

Xiaolin Ma*

Ministry of Education, Key Laboratory for Biodiversity Science and Ecological Engineering, School of Life Science, Fudan University, Songhu Road 2005, Shanghai, China

Yijun Ni*

Ministry of Education, Key Laboratory for Biodiversity Science and Ecological Engineering, School of Life Science, Fudan University, Songhu Road 2005, Shanghai, China

Xiaoyu Wang

Ministry of Education, Key Laboratory for Biodiversity Science and Ecological Engineering, School of Life Science, Fudan University, Songhu Road 2005, Shanghai, China

Wei Hu
Ministry of Education, Key Laboratory for Biodiversity Science and Ecological Engineering, School of Life Science, Fudan University, Songhu Road 2005, Shanghai, China

*Mingbo Yin*

Ministry of Education, Key Laboratory for Biodiversity Science and Ecological Engineering, School of Life Science, Fudan University, Songhu Road 2005, Shanghai, China

*yinm@fudan.edu.cn*

*Contributed equally.*

Supplementary material
FIGURE S1  Measured features of morphology of Daphnia magna are indicated: HL, head length; BW, body width; BL, body length.
FIGURE S2  (A) Head length, (B) head length/body length, (C) body width, (D) body length/body width, (E) body length of Daphnia magna from 8 populations. Each boxplot indicates median, interquartile range and range (minimum to maximum). Blue boxplots indicate D. magna populations from lowland China, and purple boxplots indicate D. magna populations from the Qinghai-Tibetan Plateau.
FIGURE S3  Relative timing of the diversification of Daphnia magna based on COI sequences. Only posterior probabilities > 0.70 are shown. Blue horizontal bars at nodes indicate the 95% HPD intervals of clade ages. The lineage IDs are shown in circles.
FIGURE S4  Results from a Bayesian assignment analysis (STRUCTURE) of microsatellite data for all eight Daphnia magna populations (K = 3 to K = 8). For lake abbreviations see table 1.
FIGURE S5  UPGMA clustering (based on Nei’s genetic distance) among eight Daphnia magna populations. The genetic distance was calculated based on variation at eleven microsatellite loci. For lake abbreviations see table 1.
| Region                                      | COI clade | GenBank ID | Sequence ID | Reference                                      |
|--------------------------------------------|-----------|------------|-------------|-----------------------------------------------|
| Mediterranean Region, Middle East and Caucasus | A1        | AY803074   | HA35        | De Gelas & De Meester, 2005                   |
| Mediterranean Region, Middle East and Caucasus | A1        | AY803075   | HA36        | De Gelas & De Meester, 2005                   |
| Mediterranean Region, Middle East and Caucasus | A1        | AY803076   | HA37        | De Gelas & De Meester, 2005                   |
| Mediterranean Region, Middle East and Caucasus | A1        | AY803077   | HA38        | De Gelas & De Meester, 2005                   |
| Mediterranean Region, Middle East and Caucasus | A1        | AY803078   | HA39        | De Gelas & De Meester, 2005                   |
| Mediterranean Region, Middle East and Caucasus | A2        | AY803069   | HA30        | De Gelas & De Meester, 2005                   |
| Mediterranean Region, Middle East and Caucasus | A2        | AY803070   | HA31        | De Gelas & De Meester, 2005                   |
| Mediterranean Region, Middle East and Caucasus | A2        | AY803071   | HA32        | De Gelas & De Meester, 2005                   |
| Western and Central Europe, Scandinavia and Karelia | A2        | AY803073   | HA34        | De Gelas & De Meester, 2005                   |
| European Russia (except its northern portion) | A2        | JF750771   | Tam         | Galimov et al., 2011                         |
| Mediterranean Region, Middle East and Caucasus | A2        | KP668794   | HK18        | Ozdemir et al., 2016                         |
| Mediterranean Region, Middle East and Caucasus | A2        | KP668795   | HK19        | Ozdemir et al., 2016                         |
| European Russia (except its northern portion) | A2        | MF346416   | Zh232       | Bekker et al., 2018                          |
| European Russia (except its northern portion) | A2        | MF346417   | Zh233       | Bekker et al., 2018                          |
| European Russia (except its northern portion) | A2        | MF346418   | Zh244       | Bekker et al., 2018                          |
| Region                                      | Accession Number | Code | Authors                  | Year       |
|---------------------------------------------|------------------|------|--------------------------|------------|
| European Russia (except its northern portion) | MF346419         | Zh252| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346421         | Zh254| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346430         | Zh587| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346446         | Zh459| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346448         | Zh099| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346451         | Zh455| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346457         | Zh554| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346461         | Zh457| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346462         | Zh458| Bekker et al., 2018      |            |
| European Russia (except its northern portion) | MF346477         | Zh519| Bekker et al., 2018      |            |
| Mediterranean Region, Middle East and Caucasus | MF346478         | ZhL2 | Bekker et al., 2018      |            |
| Scandinavia and Karelia                       | AY803040         | HA1  | De Gelas & De Meester, 2005 |
| Mediterranean Region, Middle East and Caucasus | AY803041         | HA2  | De Gelas & De Meester, 2005 |
| Scandinavia and Karelia                       | AY803042         | HA3  | De Gelas & De Meester, 2005 |
| Western and Central Europe, Scandinavia and Karelia | AY803043     | HA4  | De Gelas & De Meester, 2005 |
| Western and Central Europe, Scandinavia and Karelia | AY803044     | HA5  | De Gelas & De Meester, 2005 |
| Region                                                                 | Accession | Reference                                                                 |
|----------------------------------------------------------------------|-----------|---------------------------------------------------------------------------|
| Western and Central Europe, Scandinavia and Karelia, Mediterranean Region, Middle East and Caucasus | A3        | Y803045 HA6 De Gelas & De Meester, 2005                                   |
| Western and Central Europe                                           | A3        | Y803046 HA7 De Gelas & De Meester, 2005                                   |
| Western and Central Europe                                           | A3        | Y803047 HA8 De Gelas & De Meester, 2005                                   |
| Scandinavia and Karelia                                              | A3        | Y803048 HA9 De Gelas & De Meester, 2005                                   |
| Scandinavia and Karelia                                              | A3        | Y803049 HA10 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803050 HA12 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803051 HA13 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803052 HA14 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803053 HA15 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803054 HA16 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803055 HA17 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803056 HA11 De Gelas & De Meester, 2005                                  |
| Western and Central Europe, Mediterranean Region, Middle East and Caucasus | A3        | Y803057 HA18 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803058 HA19 De Gelas & De Meester, 2005                                  |
| Western and Central Europe                                           | A3        | Y803059 HA20 De Gelas & De Meester, 2005                                  |
| Scandinavia and Karelia                                              | A3        | Y803060 HA21 De Gelas & De Meester, 2005                                  |
| Mediterranean Region, Middle East and Caucasus                       | A3        | Y803061 HA22 De Gelas & De Meester, 2005                                  |
| Region                                                                 | Accession 1     | Accession 2   | Accession 3     | Reference                              |
|-----------------------------------------------------------------------|----------------|--------------|----------------|----------------------------------------|
| Mediterranean Region, Middle East and Caucasus                         | A3             | AY803062     | HA23           | De Gelas & De Meester, 2005             |
| Mediterranean Region, Middle East and Caucasus                         | A3             | AY803063     | HA24           | De Gelas & De Meester, 2005             |
| Mediterranean Region, Middle East and Caucasus                         | A3             | AY803064     | HA25           | De Gelas & De Meester, 2005             |
| Western and Central Europe                                             | A3             | AY803065     | HA26           | De Gelas & De Meester, 2005             |
| Western and Central Europe                                             | A3             | AY803066     | HA27           | De Gelas & De Meester, 2005             |
| Western and Central Europe                                             | A3             | AY803067     | HA28           | De Gelas & De Meester, 2005             |
| Mediterranean Region, Middle East and Caucasus                         | A3             | AY803068     | HA29           | De Gelas & De Meester, 2005             |
| Western and Central Europe                                             | A3             | AY803072     | HA33           | De Gelas & De Meester, 2005             |
| Mediterranean Region, Middle East and Caucasus                         | A3             | DQ166849     | Israel         | Petrush et al., 2009                   |
| laboratory cultures and apparent invaders                              | A3             | EU702132     | culture_Canada | Elias-Gutierrez et al., 2008           |
| laboratory cultures and apparent invaders                              | A3             | EU702133     | culture_Canada-2 | Elias-Gutierrez et al., 2008         |
| laboratory cultures and apparent invaders                              | A3             | EU702134     | culture_Mexico | Elias-Gutierrez et al., 2008           |
| laboratory cultures and apparent invaders                              | A3             | EU702135     | culture_Mexico-2 | Elias-Gutierrez et al., 2008     |
| laboratory cultures and apparent invaders                              | A3             | EU702136     | culture_Mexico-3 | Elias-Gutierrez et al., 2008   |
| laboratory cultures and apparent invaders                              | A3             | EU702137     | culture_Mexico-4 | Elias-Gutierrez et al., 2008   |
| laboratory cultures and apparent invaders                              | A3             | EU702138     | culture_Mexico-5 | Elias-Gutierrez et al., 2008   |
| European Russia (except its northern portion)                          | A3             | JF750768     | BN1            | Galimov et al., 2011                  |
| European Russia (except its northern portion)                          | A3             | JF750769     | BN2            | Galimov et al., 2011                  |
| European Russia (except its northern portion)                          | A3             | JF750770     | MZ             | Galimov et al., 2011                  |
| Western and Central Europe | A3   | JQ279821 | Dana1 | Orsini et al., 2013 |
|---------------------------|------|----------|-------|---------------------|
| Western and Central Europe| A3   | JQ279822 | Dana5 | Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279823 | Dana9 | Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279824 | Dana10| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279825 | Dana11| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279826 | Dana13| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279827 | Dana14| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279828 | Dana15| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279829 | Dana16| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279830 | Dana17| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279831 | Dana18| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279832 | Dana19| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279833 | Dana20| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279834 | Dana21| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279835 | Dana22| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279836 | Dana23| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279837 | Dana24| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279838 | Dana25| Orsini et al., 2013 |
| Western and Central Europe| A3   | JQ279839 | Dana26| Orsini et al., 2013 |
| Region       | Article Identifier | Last Name | Reference          |
|--------------|--------------------|-----------|--------------------|
| Western and Central Europe | A3 JQ279840       | Dana27    | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279841       | Dana28    | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279842       | Dana29    | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279843       | Dana30    | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279844       | Dana31    | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279845       | Dana32    | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279846       | Kno17     | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279847       | Kno17-2   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279848       | Kno17-3   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279849       | Kno17-4   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279850       | Kno17-5   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279851       | Kno17-6   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279852       | Kno17-7   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279853       | Kno17-8   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279854       | Kno17-9   | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279855       | Kno17-10  | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279856       | Kno17-11  | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279857       | Kno17-12  | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ279858       | Kno17-13  | Orsini et al., 2013 |
| Region                  | Page | Accession | Kno17- | Authors          |
|-------------------------|------|-----------|--------|------------------|
| Western and Central Europe | A3   | JQ279859  | Kno17-14 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279860  | Kno17-15 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279861  | Kno17-16 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279862  | Kno17-17 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279863  | Kno17-18 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279864  | Kno17-19 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279865  | Kno17-20 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279866  | Kno17-21 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279867  | Kno17-22 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279868  | Kno17-23 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279869  | Kno17-24 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279870  | Kno17-25 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279871  | Kno17-26 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279872  | Kno17-27 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279873  | Kno17-28 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279874  | Kno17-29 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279875  | Kno17-30 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279876  | Kno17-31 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ279877  | Kno17-32 | Orsini et al., 2013 |
Western and Central Europe    A3    JQ279878    Kno17-33    Orsini et al., 2013
Western and Central Europe    A3    JQ279879    Kno17-34    Orsini et al., 2013
Western and Central Europe    A3    JQ279880    Kno17-35    Orsini et al., 2013
Western and Central Europe    A3    JQ279881    Kno17-36    Orsini et al., 2013
Western and Central Europe    A3    JQ279882    Kno52    Orsini et al., 2013
Western and Central Europe    A3    JQ279883    Kno52-2    Orsini et al., 2013
Western and Central Europe    A3    JQ279884    Kno52-3    Orsini et al., 2013
Western and Central Europe    A3    JQ279885    Kno52-4    Orsini et al., 2013
Western and Central Europe    A3    JQ279886    Kno52-5    Orsini et al., 2013
Western and Central Europe    A3    JQ279887    Kno52-6    Orsini et al., 2013
Western and Central Europe    A3    JQ279888    Kno52-7    Orsini et al., 2013
Western and Central Europe    A3    JQ279889    Kno52-8    Orsini et al., 2013
Western and Central Europe    A3    JQ279890    Kno52-9    Orsini et al., 2013
Western and Central Europe    A3    JQ279891    Kno52-10   Orsini et al., 2013
Western and Central Europe    A3    JQ279892    Kno52-11   Orsini et al., 2013
Western and Central Europe    A3    JQ279893    Kno52-12   Orsini et al., 2013
Western and Central Europe    A3    JQ279894    Kno52-13   Orsini et al., 2013
Western and Central Europe    A3    JQ279895    Kno52-14   Orsini et al., 2013
Western and Central Europe    A3    JQ279896    Kno52-15   Orsini et al., 2013
| Western and Central Europe | A3 | JQ279897 | Kno52-16 | Orsini et al., 2013 |
|--------------------------|----|----------|----------|---------------------|
| Western and Central Europe | A3 | JQ279898 | Kno52-17 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279899 | Kno52-18 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279900 | Kno52-19 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279901 | Kno52-20 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279902 | MO1      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279903 | MO2      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279904 | MO3      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279905 | MO4      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279906 | MO5      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279907 | MO6      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279908 | MO7      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279909 | MO8      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279910 | MO9      | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279911 | MO10     | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279912 | MO11     | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279913 | MO12     | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279914 | MO13     | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279915 | MO14     | Orsini et al., 2013 |
| Western and Central Europe | A3       | JQ279916 | MO15 | Orsini et al., 2013 |
|---------------------------|---------|----------|------|---------------------|
| Western and Central Europe | A3     | JQ279917 | MO16 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279918 | MO17 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279919 | MO18 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279920 | MO19 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279921 | MO20 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279922 | MO21 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279923 | MO22 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279924 | MO23 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279925 | MO24 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279926 | MO25 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279927 | MO26 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279928 | MO27 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279929 | MO28 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279930 | MO29 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279931 | MO30 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279932 | MO31 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279933 | MO32 | Orsini et al., 2013 |
| Western and Central Europe | A3     | JQ279934 | MO33 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279935 | MO34 | Orsini et al., 2013 |
|---------------------------|----|----------|------|---------------------|
| Western and Central Europe | A3 | JQ279936 | MO35 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279937 | MO36 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279938 | OM2  | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279939 | OM2-2| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279940 | OM2-3| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279941 | OM2-4| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279942 | OM2-5| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279943 | OM2-6| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279944 | OM2-7| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279945 | OM2-8| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279946 | OM2-9| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279947 | OM2-10| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279948 | OM2-11| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279949 | OM2-12| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279950 | OM2-13| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279951 | OM2-14| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279952 | OM2-15| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ279953 | OM2-16| Orsini et al., 2013 |
| Region                        | Volume | Identifier | Issue | Reference               |
|-------------------------------|--------|------------|-------|-------------------------|
| Western and Central Europe    | A3     | JQ279954   | OM2-17| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279955   | OM2-18| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279956   | OM2-19| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279957   | OM2-20| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279958   | OM2-21| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279959   | OM2-22| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279960   | OM2-23| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279961   | OM2-24| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279962   | OM2-25| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279963   | OM2-26| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279964   | OM3   | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279965   | OM3-2 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279966   | OM3-3 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279967   | OM3-4 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279968   | OM3-5 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279969   | OM3-6 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279970   | OM3-7 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279971   | OM3-8 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ279972   | OM3-9 | Orsini et al., 2013     |
| Western and Central Europe | A3    | JQ279973 | OM3-10     | Orsini et al., 2013 |
|---------------------------|-------|----------|------------|---------------------|
| Western and Central Europe | A3    | JQ279974 | OM3-11     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279975 | OM3-12     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279976 | OM3-13     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279977 | OM3-14     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279978 | OM3-15     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279979 | OM3-16     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279980 | OM3-17     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279981 | OM3-18     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279982 | OM3-19     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279983 | OM3-20     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279984 | OM3-21     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279985 | OM3-22     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279986 | OM3-23     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279987 | OM3-24     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279988 | OM3-25     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279989 | OM3-26     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279990 | OM3-27     | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ279991 | OM3-28     | Orsini et al., 2013 |
Western and Central Europe | A3   | JQ279992 | OM3-29 | Orsini et al., 2013
Western and Central Europe | A3   | JQ279993 | OM3-30 | Orsini et al., 2013
Western and Central Europe | A3   | JQ279994 | OM3-31 | Orsini et al., 2013
Western and Central Europe | A3   | JQ279995 | OM3-32 | Orsini et al., 2013
Western and Central Europe | A3   | JQ279996 | OM3-33 | Orsini et al., 2013
Western and Central Europe | A3   | JQ279997 | OM3-34 | Orsini et al., 2013
Western and Central Europe | A3   | JQ279998 | OM3-35 | Orsini et al., 2013
Western and Central Europe | A3   | JQ279999 | OM3-36 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280000 | Ter1   | Orsini et al., 2013
Western and Central Europe | A3   | JQ280001 | Ter1-2 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280002 | Ter1-3 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280003 | Ter1-4 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280004 | Ter1-5 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280005 | Ter1-6 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280006 | Ter1-7 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280007 | Ter1-8 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280008 | Ter1-9 | Orsini et al., 2013
Western and Central Europe | A3   | JQ280009 | Ter1-10| Orsini et al., 2013
Western and Central Europe | A3   | JQ280010 | Ter1-11| Orsini et al., 2013
| Western and Central Europe | A3   | JQ280011 | Ter1-12 | Orsini et al., 2013 |
|---------------------------|------|----------|---------|--------------------|
| Western and Central Europe| A3   | JQ280012 | Ter1-13 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280013 | Ter1-14 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280014 | Ter1-15 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280015 | Ter1-16 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280016 | Ter1-17 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280017 | Ter1-18 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280018 | Ter1-19 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280019 | Ter1-20 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280020 | Ter1-21 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280021 | Ter1-22 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280022 | Ter1-23 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280023 | Ter1-24 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280024 | Ter1-25 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280025 | Ter1-26 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280026 | Ter1-27 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280027 | Ter1-28 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280028 | Ter1-29 | Orsini et al., 2013|
| Western and Central Europe| A3   | JQ280029 | Ter1-30 | Orsini et al., 2013|
| Region                        | Code  | Parameter | Year       |
|-------------------------------|-------|-----------|------------|
| Western and Central Europe    | A3    | JQ280030  | 2013       |
| Western and Central Europe    | A3    | JQ280031  | 2013       |
| Western and Central Europe    | A3    | JQ280032  | 2013       |
| Western and Central Europe    | A3    | JQ280033  | 2013       |
| Western and Central Europe    | A3    | JQ280034  | 2013       |
| Western and Central Europe    | A3    | JQ280035  | 2013       |
| Western and Central Europe    | A3    | JQ280036  | 2013       |
| Western and Central Europe    | A3    | JQ280037  | 2013       |
| Western and Central Europe    | A3    | JQ280038  | 2013       |
| Western and Central Europe    | A3    | JQ280039  | 2013       |
| Western and Central Europe    | A3    | JQ280040  | 2013       |
| Western and Central Europe    | A3    | JQ280041  | 2013       |
| Western and Central Europe    | A3    | JQ280042  | 2013       |
| Western and Central Europe    | A3    | JQ280043  | 2013       |
| Western and Central Europe    | A3    | JQ280044  | 2013       |
| Western and Central Europe    | A3    | JQ280045  | 2013       |
| Western and Central Europe    | A3    | JQ280046  | 2013       |
| Western and Central Europe    | A3    | JQ280047  | 2013       |
| Western and Central Europe    | A3    | JQ280048  | 2013       |
| Region                      | Code  | Publication | Authors    |
|-----------------------------|-------|-------------|------------|
| Western and Central Europe  | A3    | JQ280049    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280050    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280051    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280052    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280053    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280054    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280055    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280056    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280057    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280058    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280059    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280060    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280061    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280062    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280063    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280064    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280065    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280066    | Orsini et al., 2013 |
| Western and Central Europe  | A3    | JQ280067    | Orsini et al., 2013 |
| Region                  | Code  | ShelfCode | Code  | Authors, Year   |
|------------------------|-------|-----------|-------|----------------|
| Western and Central Europe | A3    | JQ280068  | ZW3-33 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280069  | ZW3-34 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280070  | ZW3-35 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280071  | ZW3-36 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280072  | ZW4    | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280073  | ZW4-2  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280074  | ZW4-3  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280075  | ZW4-4  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280076  | ZW4-5  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280077  | ZW4-6  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280078  | ZW4-7  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280079  | ZW4-8  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280080  | ZW4-9  | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280081  | ZW4-10 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280082  | ZW4-11 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280083  | ZW4-12 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280084  | ZW4-13 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280085  | ZW4-14 | Orsini et al., 2013 |
| Western and Central Europe | A3    | JQ280086  | ZW4-15 | Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280106 | BlaIn | Orsini et al., 2013 |
|----------------------------|----|----------|-------|---------------------|
| Western and Central Europe | A3 | JQ280107 | BlaIn-2| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280108 | BlaIn-3| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280109 | BlaIn-4| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280110 | BlaIn-5| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280111 | BlaIn-6| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280112 | BlaIn-7| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280113 | BlaIn-8| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280114 | BlaIn-9| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280115 | BlaIn-10| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280116 | BlaIn-11| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280117 | BlaIn-12| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280118 | BlaIn-13| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280119 | BlaIn-14| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280120 | BlaIn-15| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280121 | BlaIn-16| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280122 | BlaIn-17| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280123 | BlaIn-18| Orsini et al., 2013 |
| Western and Central Europe | A3 | JQ280124 | BlaIn-19| Orsini et al., 2013 |
Western and Central Europe  A3  JQ280125  BlaIn-20  Orsini et al., 2013
Western and Central Europe  A3  JQ280126  BlaIn-21  Orsini et al., 2013
Western and Central Europe  A3  JQ280127  BlaIn-22  Orsini et al., 2013
Western and Central Europe  A3  JQ280128  BlaIn-23  Orsini et al., 2013
Western and Central Europe  A3  JQ280129  DA2  Orsini et al., 2013
Western and Central Europe  A3  JQ280130  DA2-2  Orsini et al., 2013
Western and Central Europe  A3  JQ280131  DA2-3  Orsini et al., 2013
Western and Central Europe  A3  JQ280132  DA2-4  Orsini et al., 2013
Western and Central Europe  A3  JQ280133  DA2-5  Orsini et al., 2013
Western and Central Europe  A3  JQ280134  DA2-6  Orsini et al., 2013
Western and Central Europe  A3  JQ280135  DA2-7  Orsini et al., 2013
Western and Central Europe  A3  JQ280136  DA2-8  Orsini et al., 2013
Western and Central Europe  A3  JQ280137  DA2-9  Orsini et al., 2013
Western and Central Europe  A3  JQ280138  DA2-10  Orsini et al., 2013
Western and Central Europe  A3  JQ280139  DA2-11  Orsini et al., 2013
Western and Central Europe  A3  JQ280140  DA2-12  Orsini et al., 2013
Western and Central Europe  A3  JQ280141  DA2-13  Orsini et al., 2013
Western and Central Europe  A3  JQ280142  DA2-14  Orsini et al., 2013
Western and Central Europe  A3  JQ280143  DA2-15  Orsini et al., 2013
| Region                  | File     | Key   | Reference               |
|------------------------|----------|-------|-------------------------|
| Western and Central Europe | A3 JQ280144 | DA2-16 | Orsini et al., 2013   |
| Western and Central Europe | A3 JQ280145 | DA2-17 | Orsini et al., 2013   |
| Western and Central Europe | A3 JQ280146 | Kno15  | Orsini et al., 2013   |
| Western and Central Europe | A3 JQ280147 | Kno15-2 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280148 | Kno15-3 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280149 | Kno15-4 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280150 | Kno15-5 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280151 | Kno15-6 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280152 | Kno15-7 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280153 | Kno15-8 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280154 | Kno15-9 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280155 | Kno15-10 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280156 | Kno15-11 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280157 | Kno15-12 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280158 | Kno15-13 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280159 | Kno15-14 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280160 | Kno15-15 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280161 | Kno15-16 | Orsini et al., 2013 |
| Western and Central Europe | A3 JQ280162 | Kno15-17 | Orsini et al., 2013 |
| Region                        | Format | Code   | Number | Source            |
|-------------------------------|--------|--------|--------|-------------------|
| Western and Central Europe    | A3     | JQ280163 | Kno15-18 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280164 | Kno15-19 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280165 | Kno15-20 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280166 | Kno16   | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280167 | Kno16-2  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280168 | Kno16-3  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280169 | Kno16-4  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280170 | Kno16-5  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280171 | Kno16-6  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280172 | Kno16-7  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280173 | Kno16-8  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280174 | Kno16-9  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280175 | Kno16-10 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280176 | Kno16-11 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280177 | Kno16-12 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280178 | Kno16-13 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280179 | Kno16-14 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280180 | Kno16-15 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280181 | Kno16-16 | Orsini et al., 2013 |
| Region                        | Format | Identifier | Volume | Authors                  |
|-------------------------------|--------|------------|--------|--------------------------|
| Western and Central Europe    | A3     | JQ280182   | Kno16-17 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280183   | Kno16-18 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280184   | Kno16-19 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280185   | Kno16-20 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280186   | Kno16-21 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280187   | Kno16-22 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280188   | Kno16-23 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280189   | Kno208   | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280190   | Kno208-2 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280191   | Kno208-3 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280192   | Kno208-4 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280193   | Kno208-5 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280194   | Kno208-6 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280195   | Kno208-7 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280196   | Kno208-8 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280197   | Kno208-9 | Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280198   | Kno208-10| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280199   | Kno208-11| Orsini et al., 2013     |
| Western and Central Europe    | A3     | JQ280200   | Kno208-12| Orsini et al., 2013     |
| Country                  | Code | ID    | Code | First author et al., Year |
|-------------------------|------|-------|------|---------------------------|
| Western and Central Europe | A3   | JQ280201 | Kno208-13 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280202 | Kno208-14 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280203 | Kno208-15 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280204 | Kno208-16 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280205 | Kno208-17 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280206 | Kno208-18 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280207 | Kno208-19 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280208 | Kno208-20 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280209 | Kno208-21 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280210 | Kno208-22 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280211 | Kno208-23 | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280212 | LRV     | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280213 | LRV-2   | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280214 | LRV-3   | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280215 | LRV-4   | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280216 | LRV-5   | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280217 | LRV-6   | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280218 | LRV-7   | Orsini et al., 2013 |
| Western and Central Europe | A3   | JQ280219 | LRV-8   | Orsini et al., 2013 |
| Region                      | Paper Code | LRV  | Authors                  |
|-----------------------------|------------|------|--------------------------|
| Western and Central Europe  | A3 JQ280220 | LRV-9 | Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280221 | LRV-10| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280222 | LRV-11| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280223 | LRV-12| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280224 | LRV-13| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280225 | LRV-14| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280226 | LRV-15| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280227 | LRV-16| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280228 | LRV-17| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280229 | LRV-18| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280230 | LRV-19| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280231 | LRV-20| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280232 | LRV-21| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280233 | LRV-22| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280234 | LRV-23| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280235 | LRV-24| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280236 | LRV-25| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280237 | LRV-26| Orsini et al., 2013     |
| Western and Central Europe  | A3 JQ280238 | OHN   | Orsini et al., 2013     |
| Country          | Code | Identifier | Code | Author                          |
|------------------|------|------------|------|---------------------------------|
| Western and Central Europe | A3   | JQ280239   | OHN-2 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280240   | OHN-3 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280241   | OHN-4 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280242   | OHN-5 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280243   | OHN-6 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280244   | OHN-7 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280245   | OHN-8 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280246   | OHN-9 | Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280247   | OHN-10| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280248   | OHN-11| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280249   | OHN-12| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280250   | OHN-13| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280251   | OHN-14| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280252   | OHN-15| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280253   | OHN-16| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280254   | OHN-17| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280255   | OHN-18| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280256   | OHN-19| Orsini et al., 2013            |
| Western and Central Europe | A3   | JQ280257   | OHN-20| Orsini et al., 2013            |
| Region                        | Volume | Identifier   | Code  | Year          |
|-------------------------------|--------|--------------|-------|---------------|
| Western and Central Europe    | A3     | JQ280258     | OHN-21| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280259     | OHN-22| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280260     | OHN-23| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280261     | OM1   | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280262     | OM1-2 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280263     | OM1-3 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280264     | OM1-4 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280265     | OM1-5 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280266     | OM1-6 | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280267     | TER2  | Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280268     | TER2-2| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280269     | TER2-3| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280270     | TER2-4| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280271     | TER2-5| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280272     | TER2-6| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280273     | TER2-7| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280274     | TER2-8| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280275     | TER2-9| Orsini et al., 2013 |
| Western and Central Europe    | A3     | JQ280276     | TER2-10| Orsini et al., 2013 |
| Region                  | Code | ID    | Code | Reference               |
|------------------------|------|-------|------|-------------------------|
| Western and Central Europe | A3   | JQ280277 | TER2-11 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280278 | TER2-12 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280279 | U2    | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280280 | U2-2  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280281 | U2-3  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280282 | U2-4  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280283 | U2-5  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280284 | U2-6  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280285 | U2-7  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280286 | U2-8  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280287 | U2-9  | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280288 | U2-10 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280289 | U2-11 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280290 | U2-12 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280291 | U2-13 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280292 | U2-14 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280293 | U2-15 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280294 | U2-16 | Orsini et al., 2013    |
| Western and Central Europe | A3   | JQ280295 | U2-17 | Orsini et al., 2013    |
| Region                               | Accession 1  | Accession 2  | Accession 3  | Accession 4  | Accession 5  |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Western and Central Europe           | JQ280296 U2-18 | Orsini et al., 2013 |
| Western and Central Europe           | JQ280297 U2-19 | Orsini et al., 2013 |
| Western and Central Europe           | JQ280298 U2-20 | Orsini et al., 2013 |
| Western and Central Europe           | JQ280299 U2-21 | Orsini et al., 2013 |
| Laboratory cultures and apparent invaders | KC616972 culMexico | Prosser et al., 2013 |
| Laboratory cultures and apparent invaders | KC616973 culMexico-2 | Prosser et al., 2013 |
| Laboratory cultures and apparent invaders | KC616974 culMexico-3 | Prosser et al., 2013 |
| Laboratory cultures and apparent invaders | KC616975 culMexico-4 | Prosser et al., 2013 |
| Laboratory cultures and apparent invaders | KC616976 culMexico-5 | Prosser et al., 2013 |
| Mediterranean Region, Middle East and Caucasus | KP668787 HK11 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668788 HK12 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668789 HK13 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668790 HK14 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668791 HK15 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668792 HK16 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668793 HK17 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668796 HK20 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668797 HK21 | Ozdemir et al., 2016 |
| Mediterranean Region, Middle East and Caucasus | KP668798 HK22 | Ozdemir et al., 2016 |
| Region                                      | Code | Accession  | Location     | Reference                |
|---------------------------------------------|------|------------|--------------|--------------------------|
| Mediterranean Region, Middle East and Caucasus | A3   | KP668799   | HK23         | Ozdemir et al., 2016     |
| European Russia (except its northern portion) | A3   | KX168590   | Zh-432       | Bekker et al., 2016       |
| European Russia (except its northern portion) | A3   | KX168591   | Zh-433       | Bekker et al., 2016       |
| European Russia (except its northern portion) | A3   | KX442694   | Saratov-2b   | Popova et al., 2016       |
| European Russia (except its northern portion) | A3   | KX442698   | Borok        | Popova et al., 2016       |
| European Russia (except its northern portion) | A3   | KX442699   | Astrakhan    | Popova et al., 2016       |
| Western and Central Europe                  | A3   | MF346415   | Zh011        | Bekker et al., 2018       |
| European Russia (except its northern portion) | A3   | MF346420   | Zh253        | Bekker et al., 2018       |
| European Russia (except its northern portion) | A3   | MF346422   | Zh445        | Bekker et al., 2018       |
| Mediterranean Region, Middle East and Caucasus | A3   | MF346423   | ZhS3         | Bekker et al., 2018       |
| Mediterranean Region, Middle East and Caucasus | A3   | MF346424   | ZhS4         | Bekker et al., 2018       |
| Western Siberia                             | A3   | MF346425   | Zh270        | Bekker et al., 2018       |
| Western Siberia                             | A3   | MF346426   | Zh271        | Bekker et al., 2018       |
| Western Siberia                             | A3   | MF346427   | Zh272        | Bekker et al., 2018       |
| Western Siberia                             | A3   | MF346428   | ZhS10        | Bekker et al., 2018       |
| European Russia (except its northern portion) | A3   | MF346429   | Zh586        | Bekker et al., 2018       |
| Western Siberia                             | A3   | MF346431   | Zh578        | Bekker et al., 2018       |
| Western Siberia                             | A3   | MF346432   | Zh580        | Bekker et al., 2018       |
| European Russia (except its northern portion) | A3   | MF346435   | Zh021        | Bekker et al., 2018       |
| Region                                      | Stage | Code   | Code2 | Authors            |
|---------------------------------------------|-------|--------|-------|--------------------|
| European Russia (except its northern portion) | A3    | MF346436 | Zh444 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346437 | Zh024 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346438 | Zh061 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346439 | Zh062 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346440 | Zh063 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346441 | Zh064 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346442 | Zh315 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346443 | Zh317 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346445 | Zh429 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346447 | Zh025 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346449 | Zh522 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346450 | Zh454 | Bekker et al., 2018 |
| Western and Central Europe                  | A3    | MF346453 | Zh461 | Bekker et al., 2018 |
| Western and Central Europe                  | A3    | MF346454 | Zh462 | Bekker et al., 2018 |
| Western and Central Europe                  | A3    | MF346456 | Zh450 | Bekker et al., 2018 |
| Western Siberia                             | A3    | MF346458 | Zh525 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346459 | Zh020 | Bekker et al., 2018 |
| European Russia (except its northern portion) | A3    | MF346460 | Zh019 | Bekker et al., 2018 |
| Western Siberia                             | A3    | MF346467 | Zh483 | Bekker et al., 2018 |
| Region                                      | Accession  | Literature                  |
|---------------------------------------------|------------|-----------------------------|
| European Russia (except its northern portion) | MF346468   | Zh537 Bekker et al., 2018   |
| European Russia (except its northern portion) | MF346472   | Zh563 Bekker et al., 2018   |
| European Russia (except its northern portion) | MF346473   | Zh540 Bekker et al., 2018   |
| European Russia (except its northern portion) | MF346474   | Zh541 Bekker et al., 2018   |
| Scandinavia and Karelia                     | MF346479   | Zh562 Bekker et al., 2018   |
| USA and Canada                              | AF217106   | NAmer Hebert et al., 2002   |
| USA and Canada                              | AY803079   | USA1 De Gelas & De Meester, 2005 |
| USA and Canada                              | AY803080   | USA2 De Gelas & De Meester, 2005 |
| Western Siberia                             | MF346433   | Zh581 Bekker et al., 2018   |
| Western Siberia                             | MF346466   | Zh479 Bekker et al., 2018   |
| Western Siberia                             | MF346469   | Zh494 Bekker et al., 2018   |
| USA and Canada                              | GU680576   | 02960 International Barcode of Life |
| USA and Canada                              | GU680596   | 0827 International Barcode of Life |
| USA and Canada                              | GU680597   | 0831 International Barcode of Life |
| USA and Canada                              | GU680598   | 0831-2 International Barcode of Life |
| USA and Canada                              | JN233921   | Canada(Manitoba) Jeffery et al., 2011 |
| Northern Eastern Siberia (Yakutia)          | MF346410   | Zh007 Bekker et al., 2018   |
| Northern Eastern Siberia (Yakutia)          | MF346411   | Zh043 Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia       | MF346434   | Zh582 Bekker et al., 2018   |
| Region                                | Accession Code | Accession Code | Region Code | Publication                                                                 |
|---------------------------------------|----------------|----------------|-------------|-----------------------------------------------------------------------------|
| Western Siberia                       | B2 MF346463    | Zh469          | Bekker et al., 2018                                                        |
| Western Siberia                       | B2 MF346464    | Zh470          | Bekker et al., 2018                                                        |
| China and Japan                       | B2 MG544040    | ARJCDam        | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544041    | ARJCDam-2      | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544042    | ARJCDam-3      | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544053    | DRCDam         | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544054    | DRCDam-2       | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544055    | DRCDam-3       | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544062    | KLKHDam        | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544063    | KLKHDam-2      | Xu et al., 2018                                                             |
| China and Japan                       | B2 MG544064    | KLKHDam-3      | Xu et al., 2018                                                             |
| China and Japan                       | B3 AY803081    | JAPAN          | De Gelas & De Meester, 2005                                                |
| China and Japan                       | B3 KF993373    | KFChina        | Xu et al., 2014                                                             |
| China and Japan                       | B3 KM207106    | MT130122-052   | Tang et al., 2014                                                           |
| Southern Eastern Siberia and Mongolia | B3 KX442692    | Mongolia-2a    | Popova et al., 2016                                                         |
| Southern Eastern Siberia and Mongolia | B3 KX442693    | Mongolia-2b    | Popova et al., 2016                                                         |
| Northern Eastern Siberia (Yakutia)    | B3 KY082572    | Yak3-25        | Reisser et al., 2017                                                       |
| Southern Eastern Siberia and Mongolia | B3 MF346401    | Zh003          | Bekker et al., 2018                                                         |
| Southern Eastern Siberia and Mongolia | B3 MF346402    | Zh179          | Bekker et al., 2018                                                         |
| Region                          | Box | Accession Number | Zone | Reference               |
|--------------------------------|-----|------------------|------|-------------------------|
| Southern Eastern Siberia and Mongolia | B3  | MF346403         | Zh005| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346404         | Zh079| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346405         | Zh001| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346406         | Zh191| Bekker et al., 2018     |
| Northern Eastern Siberia (Yakutia) | B3  | MF346407         | Zh013| Bekker et al., 2018     |
| Northern Eastern Siberia (Yakutia) | B3  | MF346408         | Zh009| Bekker et al., 2018     |
| Northern Eastern Siberia (Yakutia) | B3  | MF346409         | Zh196| Bekker et al., 2018     |
| Northern Eastern Siberia (Yakutia) | B3  | MF346412         | Zh044| Bekker et al., 2018     |
| Northern Eastern Siberia (Yakutia) | B3  | MF346413         | Zh017| Bekker et al., 2018     |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414         | Zh051| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346444         | Zh451| Bekker et al., 2018     |
| China and Japan                 | B3  | MF346452         | Zh428| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346455         | Zh533| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346465         | Zh471| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346470         | Zh499| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346471         | Zh500| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346475         | Zh559| Bekker et al., 2018     |
| Southern Eastern Siberia and Mongolia | B3  | MF346476         | Zh427| Bekker et al., 2018     |
| Region                        | COI clade | GenBank ID | Sequence ID | Reference               |
|-------------------------------|-----------|------------|-------------|-------------------------|
| Western Siberia               | B1        | MF346433   | Zh581       | Bekker et al., 2018     |
| Western Siberia               | B1        | MF346466   | Zh479       | Bekker et al., 2018     |
| Western Siberia               | B1        | MF346466   | Zh480       | Bekker et al., 2018     |
| Western Siberia               | B1        | MF346466   | Zh481       | Bekker et al., 2018     |
| Western Siberia               | B1        | MF346469   | Zh494       | Bekker et al., 2018     |
| Western Siberia               | B1        | MF346469   | Zh495       | Bekker et al., 2018     |
| Western Siberia               | B1        | MF346469   | Zh496       | Bekker et al., 2018     |
| USA and Canada                | B2        | GU680576   | 02960       | International Barcode of Life |
| USA and Canada                | B2        | GU680596   | 0827        | International Barcode of Life |
| USA and Canada                | B2        | GU680597   | 0831        | International Barcode of Life |
| USA and Canada                | B2        | GU680598   | 0831-2      | International Barcode of Life |
| USA and Canada                | B2        | JN233921   | Canada (Manitoba) | Jeffery et al., 2011 |
| USA and Canada                | B2        | MF346410   | Zh007       | Bekker et al., 2018     |
| USA and Canada                | B2        | MF346410   | Zh008       | Bekker et al., 2018     |
| USA and Canada                | B2        | MF346410   | Zh046       | Bekker et al., 2018     |
| USA and Canada                | B2        | MF346410   | Zh211       | Bekker et al., 2018     |
| Region                               | Code | Accession | Reference                  |
|--------------------------------------|------|-----------|----------------------------|
| Northern Eastern Siberia (Yakutia)  | B2   | MF346410  | Zh212 Bekker et al., 2018  |
| Northern Eastern Siberia (Yakutia)  | B2   | MF346411  | Zh043 Bekker et al., 2018  |
| Northern Eastern Siberia (Yakutia)  | B2   | MF346411  | Zh047 Bekker et al., 2018  |
| Northern Eastern Siberia (Yakutia)  | B2   | MF346411  | Zh049 Bekker et al., 2018  |
| Northern Eastern Siberia (Yakutia)  | B2   | MF346411  | Zh050 Bekker et al., 2018  |
| Southern Eastern Siberia and Mongolia| B2   | MF346434  | Zh582 Bekker et al., 2018  |
| Southern Eastern Siberia and Mongolia| B2   | MF346434  | Zh583 Bekker et al., 2018  |
| Western Siberia                      | B2   | MF346463  | Zh469 Bekker et al., 2018  |
| Western Siberia                      | B2   | MF346464  | Zh470 Bekker et al., 2018  |
| China and Japan                      | B2   | MG544040  | ARJCDam Xu et al., 2018    |
| China and Japan                      | B2   | MG544041  | ARJCDam-2 Xu et al., 2018   |
| China and Japan                      | B2   | MG544042  | ARJCDam-3 Xu et al., 2018   |
| China and Japan                      | B2   | MG544053  | DRCDam Xu et al., 2018      |
| China and Japan                      | B2   | MG544054  | DRCDam-2 Xu et al., 2018    |
| China and Japan                      | B2   | MG544055  | DRCDam-3 Xu et al., 2018    |
| China and Japan                      | B2   | MG544062  | KLKHDam Xu et al., 2018     |
| China and Japan                      | B2   | MG544063  | KLKHDam-2 Xu et al., 2018   |
| China and Japan                      | B2   | MG544064  | KLKHDam-3 Xu et al., 2018   |
| China and Japan                      | B3   | AY803081  | JAPAN De Gelas & De Meester, 2005 |
| Location                          | Accession | Other Accession | Authors               |
|----------------------------------|-----------|----------------|-----------------------|
| China and Japan                 | KF993373  |                | Xu et al., 2014       |
| China and Japan                 | KM207106  | MT130122-052   | Tang et al., 2014     |
| Southern Eastern Siberia and Mongolia | KX442692  | Mongolia-2a    | Popova et al., 2016   |
| Southern Eastern Siberia and Mongolia | KX442693  | Mongolia-2b    | Popova et al., 2016   |
| Northern Eastern Siberia (Yakutia) | KY082572  | Yak3-25        | Reisser et al., 2017  |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh003          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh091          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh092          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh177          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh178          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh180          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh181          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh184          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh185          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh186          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh187          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh188          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh189          | Bekker et al., 2018   |
| Southern Eastern Siberia and Mongolia | MF346401  | Zh190          | Bekker et al., 2018   |
| Region                        | Code | Accession | Reference          |
|-------------------------------|------|-----------|--------------------|
| Southern Eastern Siberia and Mongolia | B3   | MF346402  | Zh179 Bekker et al., 2018 |
|                              | B3   | MF346403  | Zh005 Bekker et al., 2018 |
|                              | B3   | MF346403  | Zh076 Bekker et al., 2018 |
|                              | B3   | MF346403  | Zh077 Bekker et al., 2018 |
|                              | B3   | MF346403  | Zh078 Bekker et al., 2018 |
|                              | B3   | MF346404  | Zh079 Bekker et al., 2018 |
|                              | B3   | MF346404  | Zh080 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh001 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh002 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh083 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh084 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh085 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh086 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh087 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh088 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh192 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh193 Bekker et al., 2018 |
|                              | B3   | MF346405  | Zh195 Bekker et al., 2018 |
|                              | B3   | MF346406  | Zh191 Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346407 | Zh013 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346407 | Zh014 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346408 | Zh009 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346409 | Zh196 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346409 | Zh197 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346412 | Zh044 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346412 | Zh048 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346413 | Zh017 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346413 | Zh018 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh051 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh052 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh053 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh054 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh055 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh058 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh059 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh222 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh223 | Bekker et al., 2018 |
| Northern Eastern Siberia (Yakutia) | B3  | MF346414 | Zh226 | Bekker et al., 2018 |
| Location                                    | B3  | MF346414 | Zh227 | Bekker et al., 2018 |
|---------------------------------------------|-----|----------|-------|---------------------|
| Northern Eastern Siberia (Yakutia)          |     | MF346414 |       |                     |
| Northern Eastern Siberia (Yakutia)          |     | MF346414 |       |                     |
| Southern Eastern Siberia and Mongolia       | B3  | MF346444 | Zh451 |                     |
| China and Japan                             | B3  | MF346452 | Zh428 |                     |
| Southern Eastern Siberia and Mongolia       |     | MF346455 | Zh533 |                     |
| Southern Eastern Siberia and Mongolia       |     | MF346465 | Zh471 |                     |
| Southern Eastern Siberia and Mongolia       |     | MF346470 | Zh499 |                     |
| Southern Eastern Siberia and Mongolia       |     | MF346471 | Zh500 |                     |
| Southern Eastern Siberia and Mongolia       |     | MF346471 | Zh502 |                     |
| Southern Eastern Siberia and Mongolia       |     | MF346475 | Zh559 |                     |
| Southern Eastern Siberia and Mongolia       |     | MF346476 | Zh427 |                     |