**Table S1** List and supplementary information of all specimens used in this study.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Locality** | **Haplo-**  **type** | **Country** | **Collecting date** | **Altitude** | **Coordinates** | **Collector** | **GenBank Acc. Number** | |
| **Co1** | **WG** |
| *Thaumalea testacea* | Black Forest | 1 | Germany | 26.11.-29.12.2011 | 375 m | 48°47’49’’N 8°22’41’’E | D. Doszkal | KT215906 | KT215963 |
| *Thaumalea testacea* | Black Forest | 2 | Germany | 26.11.-29.12.2011 | 375 m | 48°47‘49‘‘N 8°22‘41‘‘E | D. Doszkal | KT215907 | KT215964 |
| *Thaumalea testacea* | Black Forest | 2 | Germany | 26.11.-29.12.2011 | 375 m | 48°47‘49‘‘N 8°22‘41‘‘E | D. Doszkal | KT215908 | KT215965 |
| *Thaumalea testacea* | Black Forest | 3 | Germany | 26.11.-29.12.2011 | 375 m | 48°47‘49‘‘N 8°22‘41‘‘E | D. Doszkal | KT215909 | KT215966 |
| *Thaumalea testacea* | Thuringian Forest | 1 | Germany | 09.05.2013 | 1580 m | 50°39’23‘‘N 10°49’39‘‘E | R. Bellstedt | KT215910 | KT215967 |
| *Thaumalea testacea* | Thuringian Forest | 2 | Germany | 09.05.2013 | 1580 m | 50°39’23‘‘N 10°49’39‘‘E | R. Bellstedt | KT215911 | KT215968 |
| *Thaumalea testacea* | Gesäuse National Park | 1 | Austria | 15.03.2012 | 683 m | 47°31’32.7‘‘N 14°32’41.7‘‘E | C. Remschak | KT215912 | KT215969 |
| *Thaumalea testacea* | Gesäuse National Park | 2 | Austria | 15.03.2012 | 683 m | 47°31’32.7‘‘N 14°32’41.7‘‘E | C. Remschak | KT215913 | KT215970 |
| *Thaumalea testacea* | Gesäuse National Park | 3 | Austria | 15.03.2012 | 684 m | 47°31’32.7‘‘N 14°32’41.7‘‘E | C. Remschak | KT215914 | KT215971 |
| *Thaumalea testacea* | Cochem-Zell | 1 | Germany | 09.08.2012 | 98 m | 50°19‘23‘‘N 07°30‘51‘‘E | B. Rulik | KT215915 | KT215972 |
| *Thaumalea truncata* | Biosphere Reserve Rhön | 1 | Germany | 17.06.2013 | 375 m | 49°42’50.2‘‘N 85°43‘28‘‘E | R. Wagner | KT215916 | KT215973 |
| *Thaumalea truncata* | Biosphere Reserve Rhön | 2 | Germany | 17.06.2013 | 375 m | 49°42’50.2‘‘N 85°43‘28‘‘E | R. Wagner | KT215917 | KT215974 |
| *Thaumalea truncata* | Biosphere Reserve Rhön | 3 | Germany | 17.06.2013 | 375 m | 49°42’50.2‘‘N 85°43‘28‘‘E | R. Wagner | KT215918 | KT215975 |
| *Thaumalea truncata* | Biosphere Reserve Rhön | 3 | Germany | 17.06.2013 | 375 m | 49°42’50.2‘‘N 85°43‘28‘‘E | R. Wagner | KT215919 | KT215976 |
| *Thaumalea truncata* | Biosphere Reserve Rhön | 4 | Germany | 17.06.2013 | 375 m | 49°42’50.2‘‘N 85°43‘28‘‘E | R. Wagner | KT215920 | KT215977 |
| *Thaumalea truncata* | Enonteklö | 1 | Finland | 17.07.-24.08.2007 | 292 m | 68°09‘08‘‘N 20°09‘84‘‘E | J. Salmela | KT215921 | KT215978 |
| *Thaumalea bezzii* | Gesäuse National Park | 1 | Austria | 17.07.2012 | 683 m | 47°31’32.7‘‘N 14°32’41.7‘‘E | C. Remschak | KT215922 | KT215979 |
| *Thaumalea bezzii* | Gesäuse National Park | 1 | Austria | 17.07.2013 | 683 m | 47°31’32.7‘‘N 14°32’41.7‘‘E | C. Remschak | KT215923 | KT215980 |
| *Thaumalea bezzii* | Gesäuse National Park | 2 | Austria | 15.08.2012 | 683 m | 47°31’32.7‘‘N 14°32’41.7‘‘E | C. Remschak | KT215924 | KT215981 |
| *Thaumalea bezzii* | Gesäuse National Park | 2 | Austria | 15.08.2012 | 684 m | 47°31’32.7‘‘N 14°32’41.7‘‘E | C. Remschak | KT215925 | KT215982 |
| *Thaumalea bezzii* | Thuringian Forest | 1 | Germany | 14.07.2013 | 1560 m | 50°40’39.1‘‘N 10°47’37.6‘‘E | R. Bellstedt | KT215926 | KT215983 |
| *Thaumalea bezzii* | Black Forest | 1 | Germany | 09.07.2013 | 375 m | 48°47‘49‘‘N 8°22‘41‘‘E | D. Doszkal | KT215927 | KT215984 |
| *Thaumalea bezzii* | Black Forest | 1 | Germany | 09.07.2013 | 375 m | 48°47‘49‘‘N 8°22‘41‘‘E | D. Doszkal | KT215928 | KT215985 |
| *Thaumalea bezzii* | Cochem-Zell | 1 | Germany | 09.08.2012 | 98 m | 50°19‘23‘‘N 7°30‘51‘‘E | B. Rulik | KT215929 | KT215986 |
| *Thaumalea caudata* | Gesäuse National Park | 1 | Austria | 17.07.2013 | 880 m | 47°29’53.3‘‘N 14°25’57.4‘‘E | C. Remschak | KT215930 | KT215987 |
| *Thaumalea freyi* | Gesäuse National Park | 1 | Austria | 28.06.2013 | 1022 m | 47°31’14.1‘‘N 14°46’56.0‘‘E | C. Remschak | KT215931 | KT215988 |
| *Thaumalea freyi* | Gesäuse National Park | 2 | Austria | 28.06.2013 | 1022 m | 47°31’14.1‘‘N 14°46’56.0‘‘E | C. Remschak | KT215932 | KT215989 |
| *Thaumalea freyi* | Gesäuse National Park | 3 | Austria | 07.08.2012 | 1022 m | 47°31’14.1‘‘N 14°46’56.0‘‘E | C. Remschak | KT215933 | KT215990 |
| *Thaumalea provincialis* | Civiasco | 1 | Italy | 13.09.2013 | 750 m | 45°48’28.5‘‘N 8°17’47.2‘‘E | G. Vingon | KT215934 | KT215991 |
| *Thaumalea provincialis* | Civiasco | 2 | Italy | 13.09.2013 | 750 m | 45°48’28.5‘‘N 8°17’47.2‘‘E | G. Vingon | KT215935 | KT215992 |
| *Thaumalea subafricana* | La Palma | 1 | Spain | 26.05.1996 | unknown | 28°43’07.5’’N 17°47’18.4’’E | A. Stark | KT215936 | KT215993 |
| *Thaumalea subafricana* | La Palma | 2 | Spain | 26.05.1996 | unknown | 28°43’07.5’’N 17°47’18.4’’E | A. Stark | KT215937 | KT215994 |
| *Protothaumalea sp.* | Azila | 1 | Morocco | 07.06.2013 | 1800 m | 34°57’44.2N 3°59’03.8‘‘E | B. Belquat | KT215938 | KT215995 |
| *Protothaumalea algira* | Mallorca | 1 | Spain | 16.05.1978 | 126 m | 39°42’10.8N 2°45’3.4‘‘E | R. Wagner | KT215939 | KT215996 |
| *Protothaumalea algira* | Mallorca | 2 | Spain | 16.05.1978 | 126 m | 39°42’10.8N 2°45’3.4‘‘E | R. Wagner | KT215940 | KT215997 |
| *Protothaumalea algira* | Mallorca | 3 | Spain | 16.05.1978 | 126 m | 39°42’10.8N 2°45’3.4‘‘E | R. Wagner | KT215941 | KT215998 |
| *Thaumalea brevidens* | Mangart | 1 | Slovenia | 13.09.1992 | 2626 m | 46°26’22.8‘‘N 13°39’15.0‘‘E | I. Sivec | KT215942 | KT215999 |
| *Thaumalea veralli* | Øygarden | 1 | Norway | 23.09.2014 | 2 m | 60°37‘N 4°49‘E | P. Ve Dahlen | KT215943 | KT216000 |
| *Thaumalea veralli* | Øygarden | 1 | Norway | 23.09.2014 | 2 m | 60°37‘N 4°49‘E | P. Ve Dahlen | KT215944 | KT216001 |
| *Thaumalea veralli* | Viðoy | 1 | Denmark | 04.-07.08.2014 | 236 m | 62°19’42.6‘‘N 6°29’47.6‘‘W | V. Baronov | KT215945 | KT216002 |
| *Thaumalea veralli* | Vágar | 1 | Denmark | 07.08.2014 | 387 m | 62°06’33.1‘‘N 7°25‘59.0‘‘W | V. Baronov | KT215946 | KT216003 |
| *Thaumalea veralli* | Vágar | 1 | Denmark | 04.08.2014 | 269 m | 62°03’22.4‘‘N 7°08’55.1‘‘W | V. Baronov | KT215947 | KT216004 |
| *Androposopa gr. larvata* | Biosphere Reserve Rhön | 1 | Germany | 08.06.2013 | 822 m | 50°27’55’’69N 9°59’54’’E | R. Wagner | KT215948 | KT216005 |
| *Androposopa gr. larvata* | Biosphere Reserve Rhön | 2 | Germany | 08.06.2013 | 822 m | 50°27’55’’69N 9°59’54’’E | R. Wagner | KT215949 | KT216006 |
| *Androposopa gr. larvata* | Biosphere Reserve Rhön | 3 | Germany | 08.06.2013 | 822 m | 50°27’55’’69N 9°59’54’’E | R. Wagner | KT215950 | KT216007 |
| *Androposopa gr. larvata* | Biosphere Reserve Rhön | 4 | Germany | 08.06.2013 | 822 m | 50°27’55’’69N 9°59’54’’E | R. Wagner | KT215951 | KT216008 |
| *Androposopa gr. larvata* | Biosphere Reserve Rhön | 4 | Germany | 08.06.2013 | 822 m | 50°27’55’’69N 9°59’54’’E | R. Wagner | KT215952 | KT216009 |
| *Androposopa gr. larvata* | Biosphere Reserve Rhön | 5 | Germany | 08.06.2013 | 822 m | 50°27’55’’69N 9°59’54’’E | R. Wagner | KT215953 | KT216010 |
| *Androposopa gr. larvata* | Gesäuse National Park | 1 | Austria | 15.07.2013 | 1580 m | 47°27’10.9‘‘N 15°22’03.1‘‘E | C. Remschak | KT215954 | KT216011 |
| *Androposopa gr. larvata* | Gesäuse National Park | 1 | Austria | 15.07.2013 | 1580 m | 47°27’10.9‘‘N 15°22’03.1‘‘E | C. Remschak | KT215955 | KT216012 |
| *Androposopa gr. larvata* | Gesäuse National Park | 2 | Austria | 15.07.2013 | 1580 m | 47°27’10.9‘‘N 15°22’03.1‘‘E | C. Remschak | KT215956 | KT216013 |
| *Androposopa nigra* | Gesäuse National Park | 1 | Austria | 17.07.2013 | 1355 m | 47°29’51.4‘‘N 14°13’43.4‘‘E | C. Remschak | KT215957 | KT216014 |
| *Androposopa nigra* | Gesäuse National Park | 2 | Austria | 28.06.2013 | 923 m | 47°29’51.4‘‘N 14°13’43.4‘‘E | C. Remschak | KT215958 | KT216015 |
| *Androposopa* sp. | Idaho | 1 | USA | 01.02.2014 | 1450 m | 44°08’16.2‘‘N 11°51’87.53‘‘W | B. SInclair | KT215959 | KT216016 |
| *Androposopa* sp. | Idaho | 2 | USA | 01.02.2014 | 1450 m | 44°08’16.2‘‘N 11°51’87.53‘‘W | B. SInclair | KT215960 | KT216017 |
| *Androposopa* sp. | Idaho | 2 | USA | 01.02.2014 | 1450 m | 44°08’16.2‘‘N 11°51’87.53‘‘W | B. SInclair | KT215961 | KT216018 |
| *Simulium* sp. | Kassel | 1 | Germany | 18.08.2014 | 167 m | 51°17‘7.31‘‘N 9°26’54.78‘‘E | P. Haubrock | KT215962 | KT216019 |
| *Culex pipiens* – Co1 | unknown |  | unknown | unknown | unknown | unknown | unknown | JQ350727.1 | - |
| *Culex quinquefasciatus* – Co1 | unknown |  | Turkey | unknown | unknown | unknown | unknown | KJ012173.1 | - |
| *Culex quinquefasciatus* – WG | unknown |  | unknown | unknown | unknown | unknown | unknown | - | XM\_001865498.1 |
| *Aedes aegypti* – Co1 | Jalna |  | India | 07.10.2012 | unknown | unknown | unknown | KC970274.1 | - |
| *Aedes aegypti* – WG | unknown |  | unknown | unknown | unknown | unknown | unknown | - | XM\_001663403. |