

## **A two-step DNA barcoding approach for delimiting moth species: moths of Dongling Mountain (Beijing, China) as a case study**

Qian Jin<sup>1†</sup>, Xi-Min Hu<sup>2†</sup>, Hui-Lin Han<sup>3</sup>, Fen Chen<sup>1</sup>, Wei-Jia Cai<sup>1</sup>, Qian-Qian Ruan<sup>1</sup>, Bo Liu<sup>1</sup>, Gui-Jie Luo<sup>1</sup>, Hao Wang<sup>1</sup>, Xu Liu<sup>1</sup>, Robert D. Ward<sup>4</sup>, Chun-Sheng Wu<sup>5</sup>, John-James Wilson<sup>6,7</sup> and Ai-Bing Zhang<sup>2\*</sup>

<sup>1</sup>*Suqian Institute of Agricultural Sciences, Jiangsu Academy of Agricultural Sciences, Suqian, Jiangsu 223800*

<sup>2</sup>*College of Life Sciences, Capital Normal University, Beijing 100048, China*

<sup>3</sup>*School of Forestry, Experiment Center, Northeast Forestry University, Haerbin 150040, China*

<sup>4</sup>*CSIRO National Research Collections Australia, GPO Box 1538, Hobart, Tasmania 7001, Australia*

<sup>5</sup>*Institute of Zoology, Chinese Academy of Sciences, 1 Beichen West Road, Chaoyang District, Beijing 100101, China*

<sup>6</sup>*School of Applied Sciences, Faculty of Computing, Engineering and Science, University of South Wales, Pontypridd, CF37 4AT, United Kingdom*

<sup>7</sup>*Department of Microbiology and Parasitology, Faculty of Medical Science, Naresuan University, Phitsanulok 65000, Thailand*

\*Corresponding: E-mail: [zhangab2008@gmail.com/zhangab2008@mail.cnu.edu.cn](mailto:zhangab2008@gmail.com/zhangab2008@mail.cnu.edu.cn)

†these authors contributed equally to this work

TableS1 Results of BIN analysis

<b>OTU</b>	<b>Mean</b>	<b>Max</b>	<b>Count</b>	<b>NN Dist</b>
<b>OTU-1</b>	0	0	2	6.937394
<b>OTU-2</b>	0	0	1	6.937394
<b>OTU-3</b>	0	0	2	11.67513
<b>OTU-4</b>	0.253807	0.507614	4	8.967851
<b>OTU-5</b>	0	0	1	8.967851
<b>OTU-6</b>	0.128918	0.338409	7	9.644671
<b>OTU-7</b>	0	0	1	9.98308
<b>OTU-8</b>	0	0	1	9.137056
<b>OTU-9</b>	0	0	1	8.291032
<b>OTU-10</b>	0	0	1	5.752961
<b>OTU-11</b>	0	0	2	9.137056
<b>OTU-12</b>	0	0	1	6.937394
<b>OTU-13</b>	0.048344	0.169205	7	6.937394
<b>OTU-14</b>	0	0	3	5.752961
<b>OTU-15</b>	0.338409	0.507614	3	5.414552
<b>OTU-16</b>	0	0	1	7.952622
<b>OTU-17</b>	0	0	1	5.414552
<b>OTU-18</b>	0.044625	0.169205	14	8.793456
<b>OTU-19</b>	0	0	1	6.260575
<b>OTU-20</b>	0.305431	1.015228	43	5.583756
<b>OTU-21</b>	0	0	1	9.306261
<b>OTU-22</b>	0	0	1	5.076142
<b>OTU-23</b>	0	0	3	5.076142
<b>OTU-24</b>	0.101523	0.169205	5	6.598984
<b>OTU-25</b>	0.197406	0.338409	4	6.598984
<b>OTU-26</b>	0	0	1	6.091371
<b>OTU-27</b>	0	0	2	6.768189
<b>OTU-28</b>	0.180485	0.338409	10	10.15228
<b>OTU-29</b>	0	0	1	6.091371
<b>OTU-30</b>	0.084602	0.169205	4	5.414552
<b>OTU-31</b>	0.225606	0.338409	3	7.275804
<b>OTU-32</b>	0.225606	0.338409	3	8.291032
<b>OTU-33</b>	0.128918	0.338409	7	8.629441
<b>OTU-34</b>	0	0	8	5.414552
<b>OTU-35</b>	0.966005	1.692047	11	10.15228
<b>OTU-36</b>	0	0	1	8.967851
<b>OTU-37</b>	0	0	1	8.967851
<b>OTU-38</b>	0	0	1	9.644671
<b>OTU-39</b>	0	0	1	10.15228
<b>OTU-40</b>	0	0	1	7.952622
<b>OTU-41</b>	0.203046	0.507614	5	10.49069

<b>OTU-42</b>	0	0	1	9.98308
<b>OTU-43</b>	0	0	1	8.291032
<b>OTU-44</b>	0.277979	0.507614	8	2.368866
<b>OTU-45</b>	0	0	1	7.275804
<b>OTU-46</b>	0.338409	0.338409	2	7.783418
<b>OTU-47</b>	0	0	1	7.614213
<b>OTU-48</b>	0.846024	0.846024	2	7.783418
<b>OTU-49</b>	0	0	4	2.368866
<b>OTU-50</b>	0	0	1	7.275804
<b>OTU-51</b>	0	0	1	6.598984
<b>OTU-52</b>	0.564016	0.846024	3	6.937394
<b>OTU-53</b>	0.084602	0.169205	4	6.937394
<b>OTU-54</b>	0	0	1	9.644671
<b>OTU-55</b>	0	0	1	8.460238
<b>OTU-56</b>	0	0	1	9.644671
<b>OTU-57</b>	0.338409	0.338409	2	9.644671
<b>OTU-58</b>	0.042301	0.169205	8	8.629441
<b>OTU-59</b>	0.564016	0.676819	3	6.598984
<b>OTU-60</b>	0	0	1	10.6599
<b>OTU-61</b>	0	0	1	8.460238
<b>OTU-62</b>	0	0	1	7.783418
<b>OTU-63</b>	0	0	1	7.275804
<b>OTU-64</b>	0	0	4	11.67513
<b>OTU-65</b>	0	0	2	7.952622
<b>OTU-66</b>	0.846024	0.846024	2	8.291032
<b>OTU-67</b>	0	0	3	9.306261
<b>OTU-68</b>	0	0	1	10.99831
<b>OTU-69</b>	0	0	1	9.475465
<b>OTU-70</b>	0.090243	0.169205	6	9.475465
<b>OTU-71</b>	0.136551	0.507614	19	10.6599
<b>OTU-72</b>	0	0	1	3.384095
<b>OTU-73</b>	0	0	1	3.384095
<b>OTU-74</b>	0	0	1	8.798646
<b>OTU-75</b>	0.148256	0.507614	15	5.245347
<b>OTU-76</b>	0	0	1	7.275804
<b>OTU-77</b>	0.112803	0.169205	3	8.121827
<b>OTU-78</b>	0	0	4	6.952965
<b>OTU-79</b>	0	0	1	3.384095
<b>OTU-80</b>	0.73322	2.199662	6	7.614213
<b>OTU-81</b>	0	0	1	5.752961
<b>OTU-82</b>	0	0	1	8.460238
<b>OTU-83</b>	0	0	1	7.614213
<b>OTU-84</b>	0	0	2	8.629441
<b>OTU-85</b>	0	0	1	5.245347

<b>OTU-86</b>	0	0	1	8.967851
<b>OTU-87</b>	0	0	1	8.629441
<b>OTU-88</b>	0	0	1	7.614213
<b>OTU-89</b>	0	0	1	8.460238
<b>OTU-90</b>	0.084602	0.169205	4	8.798646
<b>OTU-91</b>	0	0	2	6.260575
<b>OTU-92</b>	0	0	3	7.445008
<b>OTU-93</b>	0	0	2	7.275804
<b>OTU-94</b>	0.146886	0.338409	4	6.952965
<b>OTU-95</b>	0	0	1	7.614213
<b>OTU-96</b>	0	0	1	9.306261
<b>OTU-97</b>	0	0	1	8.798646
<b>OTU-98</b>	0	0	1	10.49069
<b>OTU-99</b>	0	0	1	8.967851
<b>OTU-100</b>	0	0	2	8.629441
<b>OTU-101</b>	0	0	1	10.32149
<b>OTU-102</b>	0	0	1	9.98308
<b>OTU-103</b>	0	0	1	11.50592
<b>OTU-104</b>	0.338409	0.338409	2	9.98308
<b>OTU-105</b>	0	0	2	8.460238
<b>OTU-106</b>	0	0	1	9.644671
<b>OTU-107</b>	0	0	1	8.798646
<b>OTU-108</b>	0	0	1	8.460238
<b>OTU-109</b>	0	0	1	8.798646
<b>OTU-110</b>	0	0	2	8.798646
<b>OTU-111</b>	0	0	1	9.137056
<b>OTU-112</b>	0.203046	0.507614	5	5.922166
<b>OTU-113</b>	0	0	3	7.106599
<b>OTU-114</b>	0	0	2	8.460238

---

TableS2 Intra-and interspecific divergences of different sequences

Genes	Type of distance	Mean	Min	Max	Std	Number	Number of Min Intert< Max Intra	Rate (%)
CO1	Intra-distance	0.0026	0	0.0102	0.0026	277	642	53.15
	Inter-distance	0.0367	0	0.0975	0.0364	1208		
CO2	Intra-distance	0.0021	0	0.0080	0.0021	277	642	53.15
	Inter-distance	0.0319	0	0.0935	0.0334	1208		
28S	Intra-distance	0.0013	0	0.0051	0.0012	277	689	57.04
	Inter-distance	0.0058	0	0.0207	0.0055	1208		
EF-1a	Intra-distance	0.0017	0	0.0401	0.0046	277	1134	93.87
	Inter-distance	0.0133	0	0.0490	0.0168	1208		
Wgl	Intra-distance	0.0034	0	0.0268	0.0035	277	742	61.42
	Inter-distance	0.0140	0	0.0579	0.0153	1208		
mtDNA	Intra-distance	0.0024	0	0.0083	0.0023	277	642	53.15
	Inter-distance	0.0348	0	0.0935	0.0351	1208		
nDNA	Intra-distance	0.0019	0	0.0197	0.0022	277	866	71.69
	Inter-distance	0.0100	0	0.0357	0.0103	1208		
5 genes combined	Intra-distance	0.0021	0	0.0126	0.0016	277	642	53.15
	Inter-distance	0.0186	0	0.0506	0.0185	1208		

TableS3 Posterior probabilities for different data sets without rjMCMC

Nodes of the species tree	Posterior probabilities ( $P=\tau < 0.0002$ ) for different data sets		
	5 loci	n DNA P	mt DNA
spnode20	0.00000	0.00000	0.24708
spnode21	0.00000	0.00000	0.27282
spnode22	0.00000	0.00000	0.31399
spnode23	0.00316	0.02559	0.59826
spnode24	0.73903	0.74681	0.97577
spnode25	0.00000	0.00000	0.42048
spnode26	1.00000	0.99446	0.98885
spnode27	1.00000	0.99977	0.99719
spnode28	1.00000	1.00000	0.99940
spnode29	1.00000	0.99999	0.99975
spnode30	1.00000	0.99810	0.99706
spnode31	1.00000	0.99961	0.99991
spnode32	0.00000	0.00000	0.29423
spnode33	0.00000	0.00000	0.37015
spnode34	0.00003	0.00037	0.53012
spnode35	0.00130	0.00864	0.72495
spnode36	0.03880	0.13163	0.91070
spnode37	0.02289	0.07010	0.75172

TableS4 Taxon information, detailed sampling sites and GenBank accession numbers.

Family	Subfamily	Species	Specimen ID	CO1	Locality
Crambidae	Pyraustinae	<i>Anania verbascalis</i>	DLS100714092	KJ183366	DLS
Crambidae	Pyraustinae	<i>Anania verbascalis</i>	DLS100714336	KJ183367	DLS
Crambidae	Pyraustinae	<i>Circobotys heterogenalis</i>	DLS100714158	KJ183368	DLS
Crambidae	Pyraustinae	<i>Pseudebulea fentoni</i>	DLS100714130	KJ183369	DLS
Crambidae	Pyraustinae	<i>Pseudebulea fentoni</i>	DLS100714287	KJ183370	DLS
Crambidae	Pyraustinae	<i>Pyrausta sp</i>	DLS100714140	KJ183371	DLS
Crambidae	Pyraustinae	<i>Pyrausta sp</i>	DLS100714213	KJ183372	DLS
Crambidae	Pyraustinae	<i>Pyrausta sp</i>	DLS100714342	KJ183373	DLS
Crambidae	Pyraustinae	<i>Pyrausta sp</i>	DLS100714350	KJ183374	DLS
Crambidae	Pyraustinae	<i>Sitochroa verticalis</i>	DLS100714347	KJ183375	DLS
Crambidae	Spilomelinae	<i>Diaphania quadrimaculalis</i>	DLS100714075	KJ183376	DLS
Crambidae	Spilomelinae	<i>Diaphania quadrimaculalis</i>	DLS100714167	KJ183377	DLS
Crambidae	Spilomelinae	<i>Diaphania quadrimaculalis</i>	DLS100714177	KJ183378	DLS
Crambidae	Spilomelinae	<i>Diaphania quadrimaculalis</i>	DLS100714233	KJ183379	DLS
Crambidae	Spilomelinae	<i>Diaphania quadrimaculalis</i>	DLS100714302	KJ183380	DLS
Crambidae	Spilomelinae	<i>Diaphania quadrimaculalis</i>	DLS100714346	KJ183381	DLS
Crambidae	Spilomelinae	<i>Diaphania quadrimaculalis</i>	DLS100714229	KJ183382	DLS
Crambidae	Spilomelinae	<i>Mecyna flavalis</i>	DLS100714227	KJ183383	DLS
Erebidae	Arctiinae	<i>Chionarctia nivea</i>	DLS100714127	KJ183387	DLS
Erebidae	Arctiinae	<i>Eilema ussurica</i>	DLS100714335	KJ183388	DLS
Erebidae	Arctiinae	<i>Epatolmis caesarea</i>	DLS100714156	KJ183389	DLS
Erebidae	Arctiinae	<i>Miltochrista striata</i>	DLS100714093	KJ183390	DLS
Erebidae	Arctiinae	<i>Miltochrista striata</i>	DLS100714321	KJ183391	DLS
Erebidae	Arctiinae	<i>Pericallia matronula</i>	DLS100714055	KJ183392	DLS
Erebidae	Arctiinae	<i>Rhyparioides amurensis</i>	DLS100714049	KJ183393	DLS
Erebidae	Arctiinae	<i>Rhyparioides amurensis</i>	DLS100714050	KJ183394	DLS
Erebidae	Arctiinae	<i>Rhyparioides amurensis</i>	DLS100714051	KJ183395	DLS
Erebidae	Arctiinae	<i>Rhyparioides amurensis</i>	DLS100714052	KJ183396	DLS
Erebidae	Arctiinae	<i>Rhyparioides amurensis</i>	DLS100714053	KJ183397	DLS
Erebidae	Arctiinae	<i>Rhyparioides amurensis</i>	DLS100714054	KJ183398	DLS
Erebidae	Arctiinae	<i>Rhyparioides amurensis</i>	DLS100714243	KJ183399	DLS
Erebidae	Arctiinae	<i>Spilosoma lubricipeda</i>	DLS100714060	KJ183400	DLS
Erebidae	Arctiinae	<i>Spilosoma lubricipeda</i>	DLS100714095	KJ183401	DLS
Erebidae	Arctiinae	<i>Spilosoma lubricipeda</i>	DLS100714305	KJ183402	DLS
Erebidae	Arctiinae	<i>Stigmatophora micans</i>	DLS100714218	KJ183405	DLS
Erebidae	Arctiinae	<i>Stigmatophora micans</i>	DLS100714319	KJ183403	DLS
Erebidae	Arctiinae	<i>Stigmatophora micans</i>	DLS100714329	KJ183404	DLS
Erebidae	Arctiinae	<i>Stigmatophora rhodophila</i>	DLS100714352	KJ183406	DLS
Erebidae	Arctiinae	<i>Asura unipuncta mekala</i>	DLS100714067	KJ183407	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714139	KJ183488	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714157	KJ183489	DLS

Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714193	KJ183490	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714194	KJ183491	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714198	KJ183492	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714220	KJ183493	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714222	KJ183494	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714252	KJ183495	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714284	KJ183496	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714292	KJ183497	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714308	KJ183498	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714309	KJ183499	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714315	KJ183500	DLS
Erebidae	Lymantrinae	<i>Euproctis niphonis</i>	DLS100714340	KJ183501	DLS
Erebidae	Lymantrinae	<i>Dasychira tristis</i>	DLS100714113	MH122657	DLS
Erebidae	Erebinae	<i>Mocis ancilla</i>	DLS100714196	KJ183426	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714062	KF797525	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714076	KF797526	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714079	KF797527	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714081	KF797528	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714089	KF797529	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714096	KF797530	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714105	KF797531	DLS
Erebidae	Hypeninae	<i>Hypena sp.1</i>	DLS100714110	KF797532	DLS
Erebidae	Hypeninae	<i>Hypena sp.2</i>	DLS100714111	KF797533	DLS
Erebidae	Hypeninae	<i>Hypena sp.3</i>	DLS100714117	KF797534	DLS
Erebidae	Hypeninae	<i>Hypena sp.3</i>	DLS100714131	KF797535	DLS
Erebidae	Hypeninae	<i>Hypena sp.4</i>	DLS100714123	KF797536	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714128	KF797537	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714144	KF797538	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714154	KF797539	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714169	KF797540	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714179	KF797541	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714207	KF797542	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714208	KF797543	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714214	KF797544	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714231	KF797545	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714244	KF797546	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714247	KF797547	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714253	KF797548	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714257	KF797549	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714261	KF797550	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714266	KF797551	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714279	KF797552	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714281	KF797553	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714314	KF797554	DLS



Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714328	KF797555	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714351	KF797556	DLS
Erebidae	Hypeninae	<i>Hypena sp.5</i>	DLS100714181	KF797557	DLS
Erebidae	Hypeninae	<i>Hypena sp.6</i>	DLS100714174	KF797558	DLS
Erebidae	Hypeninae	<i>Hypena sp.7</i>	DLS100714176	KF797559	DLS
Erebidae	Hypeninae	<i>Hypena sp.7</i>	DLS100714260	KF797560	DLS
Erebidae	Hypeninae	<i>Hypena squalida</i>	DLS100714083	KF797561	DLS
Erebidae	Hypeninae	<i>Hypena squalida</i>	DLS100714124	KF797562	DLS
Erebidae	Hypeninae	<i>Hypena squalida</i>	DLS100714148	KF797563	DLS
Erebidae	Hypeninae	<i>Hypena squalida</i>	DLS100714166	KF797564	DLS
Erebidae	Hypeninae	<i>Hypena squalida</i>	DLS100714173	KF797565	DLS
Erebidae	Hypeninae	<i>Hypena squalida</i>	DLS100714273	KF797566	DLS
Erebidae	Hypeninae	<i>Hypena squalida</i>	DLS100714334	KF797567	DLS
Erebidae	Hypeninae	<i>Hypena rivuligera</i>	BHS100704018	KF797579	BHS
Erebidae	Hypeninae	<i>Hypena stygiana</i>	BHS100703072	KF797576	BHS
Erebidae	Hypeninae	<i>Hypena stygiana</i>	BHS100703246	KF797577	BHS
Erebidae	Hypeninae	<i>Hypena stygiana</i>	WLS100722081	KF797578	WLS
Erebidae	Hypeninae	<i>Hypena kengkalis</i>	BHS100703096	KF797569	BHS
Erebidae	Hypeninae	<i>Hypena kengkalis</i>	BHS100705124	KF797568	BHS
Erebidae	Hypeninae	<i>Hypena kengkalis</i>	LJZ100813106	KF797570	LJZ
Erebidae	Hypeninae	<i>Hypena tristalis</i>	BHS100704002	KF797572	BHS
Erebidae	Hypeninae	<i>Hypena tristalis</i>	BHS100705023	KF797573	BHS
Erebidae	Hypeninae	<i>Hypena tristalis</i>	BHS100705066	KF797574	BHS
Erebidae	Hypeninae	<i>Hypena tristalis</i>	LJZ100726556	KF797575	LJZ
Erebidae	Hypeninae	<i>Hypena tristalis</i>	WLS100722349	KF797571	WLS
Erebidae	Herminiinae	<i>Paracolax tristalis</i>	DLS100714070	KJ183446	DLS
Erebidae	Herminiinae	<i>Paracolax tristalis</i>	DLS100714232	KJ183447	DLS
Erebidae	Herminiinae	<i>Paracolax tristalis</i>	DLS100714263	KJ183448	DLS
Erebidae	Herminiinae	<i>Paracolax tristalis</i>	DLS100714290	KJ183449	DLS
Erebidae	Herminiinae	<i>Zanclognatha lunalis</i>	DLS100714088	KJ183450	DLS
Erebidae	Herminiinae	<i>Zanclognatha lunalis</i>	DLS100714142	KJ183451	DLS
Erebidae	Herminiinae	<i>Zanclognatha lunalis</i>	DLS100714187	KJ183452	DLS
Erebidae	Herminiinae	<i>Zanclognatha lunalis</i>	DLS100714316	KJ183453	DLS
Erebidae	Herminiinae	<i>Zanclognatha lunalis</i>	DLS100714349	KJ183454	DLS
Erebidae	Herminiinae	<i>Simplicia sp.</i>	DLS100714155	KJ183487	DLS
Erebidae	Pangraptinae	<i>Pangrapta disruptalis</i>	DLS100714091	KJ183465	DLS
Erebidae	Pangraptinae	<i>Pangrapta disruptalis</i>	DLS100714136	KJ183466	DLS
Erebidae	Pangraptinae	<i>Pangrapta lunulata</i>	DLS100714296	KJ183467	DLS
Erebidae	Pangraptinae	<i>Pangrapta sp.</i>	DLS100714164	KJ183468	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714024	KJ183225	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714025	KJ183226	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714026	KJ183227	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714027	KJ183228	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714028	KJ183229	DLS

Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714029	KJ183230	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714030	KJ183231	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714031	KJ183232	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714032	KJ183233	DLS
Geometridae	Ennominae	<i>Abraxas sp</i>	DLS100714033	KJ183234	DLS
Geometridae	Ennominae	<i>Amraica confusa</i>	DLS100714056	KJ183235	DLS
Geometridae	Ennominae	<i>Amraica confusa</i>	DLS100714074	KJ183236	DLS
Geometridae	Ennominae	<i>Amraica confusa</i>	DLS100714274	KJ183237	DLS
Geometridae	Ennominae	<i>Arichanna melanariafraterna</i>	DLS100714012	KJ183238	DLS
Geometridae	Ennominae	<i>Arichanna melanariafraterna</i>	DLS100714014	KJ183239	DLS
Geometridae	Ennominae	<i>Arichanna melanariafraterna</i>	DLS100714018	KJ183240	DLS
Geometridae	Ennominae	<i>Arichanna melanariafraterna</i>	DLS100714023	KJ183241	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714013	KJ183242	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714015	KJ183243	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714016	KJ183244	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714017	KJ183245	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714019	KJ183246	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714021	KJ183248	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714022	KJ183249	DLS
Geometridae	Ennominae	<i>Arichanna sinica</i>	DLS100714020	KJ183247	DLS
Geometridae	Ennominae	<i>Ascotis dianaria</i>	DLS100714035	KJ183251	DLS
Geometridae	Ennominae	<i>Ascotis dianaria</i>	DLS100714039	KJ183253	DLS
Geometridae	Ennominae	<i>Ascotis dianaria</i>	DLS100714040	KJ183254	DLS
Geometridae	Ennominae	<i>Ascotis dianaria</i>	DLS100714046	KJ183256	DLS
Geometridae	Ennominae	<i>Ascotis dianaria</i>	DLS100714068	KJ183250	DLS
Geometridae	Ennominae	<i>Ascotis dianaria</i>	DLS100714215	KJ183258	DLS
Geometridae	Ennominae	<i>Ascotis dianaria</i>	DLS100714297	KJ183260	DLS
Geometridae	Ennominae	<i>Ascotis selenaria</i>	DLS100714036	KJ183252	DLS
Geometridae	Ennominae	<i>Ascotis selenaria</i>	DLS100714042	KJ183255	DLS
Geometridae	Ennominae	<i>Ascotis selenaria</i>	DLS100714061	KJ183257	DLS
Geometridae	Ennominae	<i>Ascotis selenaria</i>	DLS100714249	KJ183259	DLS
Geometridae	Ennominae	<i>Biston betularia</i>	DLS100714038	KJ183261	DLS
Geometridae	Ennominae	<i>Biston betularia</i>	DLS100714120	KJ183262	DLS
Geometridae	Ennominae	<i>Biston betularia</i>	DLS100714121	KJ183263	DLS
Geometridae	Ennominae	<i>Biston thoracicaria</i>	DLS100714086	KJ183264	DLS
Geometridae	Ennominae	<i>Biston thoracicaria</i>	DLS100714103	KJ183265	DLS
Geometridae	Ennominae	<i>Biston thoracicaria</i>	DLS100714171	KJ183266	DLS
Geometridae	Ennominae	<i>Biston thoracicaria</i>	DLS100714185	KJ183267	DLS
Geometridae	Ennominae	<i>Biston thoracicaria</i>	DLS100714271	KJ183268	DLS
Geometridae	Ennominae	<i>Biston thoracicaria</i>	DLS100714294	KJ183269	DLS
Geometridae	Ennominae	<i>Biston thoracicaria</i>	DLS100714330	KJ183270	DLS
Geometridae	Ennominae	<i>Cabera sp</i>	DLS100714224	KJ183271	DLS
Geometridae	Ennominae	<i>Chiasmia hebesata</i>	DLS100714320	KJ183273	DLS
Geometridae	Ennominae	<i>Ectropis excellens</i>	DLS100714235	KJ183276	DLS

Geometridae	Ennominae	<i>Ennomos quercaria</i>	DLS100714293	KJ183277	DLS
Geometridae	Ennominae	<i>Hypomecis punctinalis</i>	DLS100714047	KJ183285	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714037	KJ183286	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714044	KJ183287	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714138	KJ183288	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714239	KJ183289	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714245	KJ183290	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714298	KJ183291	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714304	KJ183292	DLS
Geometridae	Ennominae	<i>Hypomecis sp1</i>	DLS100714345	KJ183293	DLS
Geometridae	Ennominae	<i>Hypomecis sp2</i>	DLS100714343	KJ183294	DLS
Geometridae	Ennominae	<i>Hypoxystis pluviana</i>	DLS100714322	KJ183295	DLS
Geometridae	Ennominae	<i>Jankowskia athleta</i>	DLS100714188	KJ183296	DLS
Geometridae	Ennominae	<i>Jankowskia sp</i>	DLS100714112	KJ183297	DLS
Geometridae	Ennominae	<i>Jankowskia sp</i>	DLS100714151	KJ183298	DLS
Geometridae	Ennominae	<i>Jankowskia sp</i>	DLS100714182	KJ183299	DLS
Geometridae	Ennominae	<i>Jankowskia sp</i>	DLS100714205	KJ183300	DLS
Geometridae	Ennominae	<i>Ophthalmitis albosignaria</i>	DLS100714001	KJ183305	DLS
Geometridae	Ennominae	<i>Ophthalmitis albosignaria</i>	DLS100714002	KJ183306	DLS
Geometridae	Ennominae	<i>Ophthalmitis albosignaria</i>	DLS100714003	KJ183307	DLS
Geometridae	Ennominae	<i>Ophthalmitis albosignaria</i>	DLS100714004	KJ183308	DLS
Geometridae	Ennominae	<i>Ophthalmitis irrorataria</i>	DLS100714041	KJ183309	DLS
Geometridae	Ennominae	<i>Ophthalmitis irrorataria</i>	DLS100714043	KJ183310	DLS
Geometridae	Ennominae	<i>Ophthalmitis irrorataria</i>	DLS100714206	KJ183311	DLS
Geometridae	Ennominae	<i>Phthonandria emaria</i>	DLS100714199	KJ183312	DLS
Geometridae	Ennominae	<i>Phthonandria emaria</i>	DLS100714289	KJ183313	DLS
Geometridae	Ennominae	<i>Phthonandria emaria</i>	DLS100714323	KJ183314	DLS
Geometridae	Ennominae	<i>Selenia sordidaria</i>	DLS100714150	KJ183326	DLS
Geometridae	Geometrinae	<i>Chlorissa obliterata</i>	DLS100714211	KJ183274	DLS
Geometridae	Geometrinae	<i>Comibaena procumbaria</i>	DLS100714338	KJ183275	DLS
Geometridae	Geometrinae	<i>Hemistola veneta</i>	DLS100714048	KJ183283	DLS
Geometridae	Geometrinae	<i>Hemistola veneta</i>	DLS100714209	KJ183284	DLS
Geometridae	Geometrinae	<i>Maxates sp</i>	DLS100714085	KJ183301	DLS
Geometridae	Geometrinae	<i>Maxates sp</i>	DLS100714282	KJ183302	DLS
Geometridae	Geometrinae	<i>Victoria sp</i>	DLS100714285	KJ183327	DLS
Geometridae	Larentiinae	<i>Chartographa sp</i>	DLS100714268	KJ183272	DLS
Geometridae	Larentiinae	<i>Eupithecia abietariagigantean</i>	DLS100714119	KJ183278	DLS
Geometridae	Larentiinae	<i>Eupithecia abietariagigantean</i>	DLS100714203	KJ183279	DLS
Geometridae	Larentiinae	<i>Eupithecia abietariagigantean</i>	DLS100714212	KJ183280	DLS
Geometridae	Larentiinae	<i>Eupithecia abietariagigantean</i>	DLS100714226	KJ183281	DLS
Geometridae	Larentiinae	<i>Eupithecia abietariagigantean</i>	DLS100714306	KJ183282	DLS
Geometridae	Larentiinae	<i>Melanthia sp</i>	DLS100714210	KJ183303	DLS
Geometridae	Orthostixinae	<i>Naxa seriaria</i>	DLS100714071	KJ183304	DLS
Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714005	KJ183315	DLS

Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714006	KJ183316	DLS
Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714007	KJ183317	DLS
Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714008	KJ183318	DLS
Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714009	KJ183319	DLS
Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714010	KJ183320	DLS
Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714011	KJ183321	DLS
Geometridae	Sterrhinae	<i>Problepsis changmei</i>	DLS100714122	KJ183322	DLS
Geometridae	Sterrhinae	<i>Scopula subpunctaria</i>	DLS100714278	KJ183323	DLS
Geometridae	Sterrhinae	<i>Scopula subpunctaria</i>	DLS100714307	KJ183324	DLS
Geometridae	Sterrhinae	<i>Scopula sp1</i>	DLS100714202	KJ183325	DLS
Geometridae	UNKNOW	<i>Iridopsis larvaria</i>	DLS100714280	MH122658	DLS
Lasiocampidae	Pinarinae	<i>Gastropacha sikkima</i>	DLS100714267	KJ183386	DLS
Limacodidae	UNKNOW	<i>Chalcoscelides castaneipars</i>	DLS100714098	KJ183328	DLS
Limacodidae	Limacodinae	<i>Monema flavescens</i>	DLS100714264	KJ183329	DLS
Limacodidae	Limacodinae	<i>Narosoideus flavidorsalis</i>	DLS100714170	KJ183330	DLS
Limacodidae	Limacodinae	<i>Narosoideus flavidorsalis</i>	DLS100714242	KJ183331	DLS
Limacodidae	Limacodinae	<i>Narosoideus flavidorsalis</i>	DLS100714272	KJ183332	DLS
Limacodidae	Limacodinae	<i>Narosoideus flavidorsalis</i>	DLS100714276	KJ183333	DLS
Limacodidae	Limacodinae	<i>Narosoideus flavidorsalis</i>	DLS100714310	KJ183334	DLS
Limacodidae	Limacodinae	<i>Narosoideus flavidorsalis</i>	DLS100714333	KJ183335	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714059	KJ183336	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714063	KJ183337	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714064	KJ183338	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714100	KJ183339	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714106	KJ183340	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714143	KJ183341	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714161	KJ183342	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714172	KJ183343	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714184	KJ183344	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714186	KJ183345	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714219	KJ183346	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714223	KJ183347	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714241	KJ183348	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714270	KJ183349	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714286	KJ183350	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714313	KJ183351	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714324	KJ183352	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714325	KJ183353	DLS
Limacodidae	Limacodinae	<i>Parasa consocia</i>	DLS100714348	KJ183354	DLS
Limacodidae	Limacodinae	<i>Thosea sinensis</i>	DLS100714114	KJ183355	DLS
Limacodidae	Limacodinae	<i>Thosea sinensis</i>	DLS100714116	KJ183356	DLS
Limacodidae	Limacodinae	<i>Thosea sinensis</i>	DLS100714135	KJ183357	DLS
Limacodidae	Limacodinae	<i>Thosea sinensis</i>	DLS100714149	KJ183358	DLS
Noctuidae	Acronictinae	<i>Acronicta rumicis</i>	DLS100714254	KJ183408	DLS

Noctuidae	Acronictinae	<i>Acronicta rumicis</i>	DLS100714258	KJ183409	DLS
Noctuidae	Acronictinae	<i>Acronicta intermedia</i>	DLS100714318	KJ183411	DLS
Noctuidae	Acronictinae	<i>Acronicta intermedia</i>	DLS100714160	KJ183410	DLS
Noctuidae	Acronictinae	<i>Acronicta major</i>	DLS100714084	KJ183412	DLS
Noctuidae	Acronictinae	<i>Acronicta major</i>	DLS100714250	KJ183413	DLS
Noctuidae	Acronictinae	<i>Acronicta major</i>	DLS100714301	KJ183414	DLS
Noctuidae	Amphipyridae	<i>Prospalta cyclica</i>	DLS100714080	KJ183482	DLS
Noctuidae	Amphipyridae	<i>Prospalta cyclica</i>	DLS100714125	KJ183483	DLS
Noctuidae	Amphipyridae	<i>Prospalta cyclica</i>	DLS100714129	KJ183484	DLS
Noctuidae	Amphipyridae	<i>Prospalta cyclica</i>	DLS100714341	KJ183485	DLS
Noctuidae	Bagisariinae	<i>Sphragifera sigillata</i>	DLS100714034	KJ183415	DLS
Noctuidae	Catocalinae	<i>Catocala fulminea</i>	DLS100714082	KJ183416	DLS
Noctuidae	Catocalinae	<i>Catocala fulminea</i>	DLS100714104	KJ183417	DLS
Noctuidae	Catocalinae	<i>Catocala fulminea</i>	DLS100714311	KJ183418	DLS
Noctuidae	Hadeninae	<i>Acosmetia chinensis</i>	DLS100714087	KJ183422	DLS
Noctuidae	Cuculliinae	<i>Cucullia fraudatrix</i>	DLS100714137	KJ183423	DLS
Noctuidae	Cuculliinae	<i>Cucullia fuchsiana</i>	DLS100714248	KJ183424	DLS
Noctuidae	Cuculliinae	<i>Cucullia umbratica</i>	DLS100714192	KJ183425	DLS
Noctuidae	Hadeninae	<i>Acosmetia biguttula</i>	DLS100714078	KJ183419	DLS
Noctuidae	Hadeninae	<i>Acosmetia biguttula</i>	DLS100714145	KJ183420	DLS
Noctuidae	Hadeninae	<i>Acosmetia biguttula</i>	DLS100714291	KJ183421	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714069	KJ183427	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714099	KJ183428	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714101	KJ183429	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714132	KJ183430	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714133	KJ183431	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714141	KJ183432	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714146	KJ183433	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714163	KJ183434	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714189	KJ183435	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714191	KJ183436	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714195	KJ183437	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714228	KJ183438	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714230	KJ183439	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714238	KJ183440	DLS
Noctuidae	Hadeninae	<i>Lacanobia aliena</i>	DLS100714327	KJ183441	DLS
Noctuidae	Hadeninae	<i>Sideridis sp</i>	DLS100714094	KJ183442	DLS
Noctuidae	Heliiothinae	<i>Raphia peustera</i>	DLS100714152	KJ183443	DLS
Noctuidae	Heliiothinae	<i>Raphia peustera</i>	DLS100714262	KJ183444	DLS
Noctuidae	Heliiothinae	<i>Schinia scutosa</i>	DLS100714277	KJ183445	DLS
Noctuidae	Unknow	<i>Lophomilia polybapta</i>	DLS100714115	KJ183479	DLS
Noctuidae	Unknow	<i>Lophomilia polybapta</i>	DLS100714275	KJ183480	DLS
Noctuidae	Noctuinae	<i>Athetis pallidipennis</i>	DLS100714077	KJ183455	DLS
Noctuidae	Noctuinae	<i>Eugraphe sigma</i>	DLS100714057	KJ183471	DLS

Noctuidae	Noctuinae	<i>Eugraphe sigma</i>	DLS100714216	KJ183472	DLS
Noctuidae	Noctuinae	<i>Eugraphe sigma</i>	DLS100714283	KJ183473	DLS
Noctuidae	Noctuinae	<i>Lasionycta contigua</i>	DLS100714090	KJ183456	DLS
Noctuidae	Noctuinae	<i>Mythimna monticola</i>	DLS100714107	KJ183457	DLS
Noctuidae	Noctuinae	<i>Mythimna monticola</i>	DLS100714118	KJ183458	DLS
Noctuidae	Noctuinae	<i>Mythimna monticola</i>	DLS100714134	KJ183459	DLS
Noctuidae	Noctuinae	<i>Mythimna monticola</i>	DLS100714234	KJ183460	DLS
Noctuidae	Noctuinae	<i>Mythimna monticola</i>	DLS100714344	KJ183461	DLS
Noctuidae	Noctuinae	<i>Mythimna monticola</i>	DLS100714236	KJ183462	DLS
Noctuidae	Noctuinae	<i>Mythimna velutina</i>	DLS100714097	KJ183463	DLS
Noctuidae	Ophiderinae	<i>Chrysothrum amata</i>	DLS100714332	KJ183464	DLS
Noctuidae	Ophiderinae	<i>Scoliopteryx libatrix</i>	DLS100714303	KJ183486	DLS
Noctuidae	Thiacidinae	<i>Panthauma egregia</i>	DLS100714221	KJ183481	DLS
Noctuidae	Xyleninae	<i>Eucarta arcta</i>	DLS100714165	KJ183469	DLS
Noctuidae	Xyleninae	<i>Eucarta arcta</i>	DLS100714337	KJ183470	DLS
Noctuidae	Nolinae	<i>Iragaodes nobilis</i>	DLS100714317	KJ183478	DLS
Noctuidae	Psaphidinae	<i>Flexivaleria mienshani</i>	DLS100714147	KJ183474	DLS
Noctuidae	Psaphidinae	<i>Flexivaleria mienshani</i>	DLS100714180	KJ183475	DLS
Noctuidae	Psaphidinae	<i>Flexivaleria mienshani</i>	DLS100714190	KJ183476	DLS
Noctuidae	Psaphidinae	<i>Flexivaleria mienshani</i>	DLS100714299	KJ183477	DLS
Notodontidae	Dicranurinae	<i>Wilemanus bidentatus</i>	DLS100714073	KJ183502	DLS
Notodontidae	Dicranurinae	<i>Wilemanus bidentatus</i>	DLS100714126	KJ183503	DLS
Notodontidae	Dicranurinae	<i>Wilemanus bidentatus</i>	DLS100714269	KJ183504	DLS
Notodontidae	Dicranurinae	<i>Wilemanus bidentatus</i>	DLS100714256	KJ183505	DLS
Notodontidae	Dudusinae	<i>Euhampsonia cristata</i>	DLS100714109	KF797580	DLS
Notodontidae	Dudusinae	<i>Euhampsonia splendida</i>	DLS100714162	KJ183506	DLS
Notodontidae	Heterocampinae	<i>Stauropus basalis</i>	DLS100714066	KF797581	DLS
Notodontidae	Heterocampinae	<i>Stauropus basalis</i>	DLS100714300	KF797582	DLS
Notodontidae	Notodontinae	<i>Gluphisia crenata meridionalis</i>	DLS100714183	KF797583	DLS
Notodontidae	Notodontinae	<i>Nerice hoenei</i>	DLS100714246	KJ183507	DLS
Notodontidae	Phalerinae	<i>Rachiades lichenicolor murzini</i>	DLS100714237	KJ183508	DLS
Notodontidae	Phalerinae	<i>Peridea lativitta</i>	DLS100714251	KF797584	DLS
Notodontidae	Phalerinae	<i>Phalera flavescens</i>	DLS100714108	KF797585	DLS
Notodontidae	Phalerinae	<i>Clostera albosig macurtuloides</i>	DLS100714072	KJ183509	DLS
Notodontidae	Phalerinae	<i>Clostera albosig macurtuloides</i>	DLS100714312	KJ183510	DLS
Notodontidae	Ptilodoninae	<i>Hagapteryx mirabilior</i>	DLS100714339	KF797586	DLS
Notodontidae	Stauropinae	<i>Fentonia ocypete</i>	DLS100714217	KF797587	DLS
Sphingidae	Macroglossinae	<i>Ampelophaga rubiginosa</i>	DLS100714353	KJ183361	DLS
Sphingidae	Macroglossinae	<i>Deilephila askoldensis</i>	DLS100714065	KJ183362	DLS
Sphingidae	Smerinthinae	<i>Callambulyx tatarinovi</i>	DLS100714265	KJ183363	DLS
Sphingidae	Smerinthinae	<i>Dolbina paraexacta</i>	DLS100714295	KJ183364	DLS
Sphingidae	Smerinthinae	<i>Dolbina paraexacta</i>	DLS100714326	KJ183365	DLS
Thyatiridae	Thyatirinae	<i>Tethea albicostata</i>	DLS100714058	KJ183384	DLS
Thyatiridae	Thyatirinae	<i>Tethea albicostata</i>	DLS100714331	KJ183385	DLS

Thyatiridae	Thyatirinae	<i>Tethea ocularis</i>	DLS100714045	KJ183359	DLS
Thyatiridae	Thyatirinae	<i>Tethea ocularis</i>	DLS100714102	KJ183360	DLS

---

DLS - Dongling mountain, BHS - Baihua mountain, WLS - Wuling mountain, LJZ - Longjiazhuang

**TableS5 Taxon information, detailed sampling sites and GenBank**

**accession numbers of *Hypena***

Family	Subfamily	Species	Specimen ID	COI	COII	28S	EF1-a	Wgl	Locality
<b>Outgroup</b>									
Notodontidae	Dudusinae	<i>Euhampsonia cristata</i>	DLS100714109	KF797580	KF797643	KF797517	KF797706	KF797769	DLS
Notodontidae	Heterocampinae	<i>Stauropus basalis</i>	DLS100714066	KF797581	KF797644	KF797518	KF797707	KF797770	DLS
Notodontidae	Heterocampinae	<i>Stauropus basalis</i>	DLS100714300	KF797582	KF797645	KF797519	KF797708	KF797771	DLS
Notodontidae	Notodontinae	<i>Gluphisia crenata meridionalis</i>	DLS100714183	KF797583	KF797646	KF797520	KF797709	KF797772	DLS
Notodontidae	Phalerinae	<i>Peridea lativitta</i>	DLS100714251	KF797584	KF797647	KF797521	KF797710	KF797773	DLS
Notodontidae	Phalerinae	<i>Phalera flavescens</i>	DLS100714108	KF797585	KF797648	KF797522	KF797711	KF797774	DLS
Notodontidae	Ptilodoninae	<i>Hagapteryx mirabilior</i>	DLS100714339	KF797586	KF797649	KF797523	KF797712	KF797775	DLS
Notodontidae	Stauropinae	<i>Fentonia ocypete</i>	DLS100714217	KF797587	KF797650	KF797524	KF797713	KF797776	DLS
<b>Ingroup</b>									
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714062	KF797525	KF797588	KF797462	KF797651	KF797714	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714076	KF797526	KF797589	KF797463	KF797652	KF797715	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714079	KF797527	KF797590	KF797464	KF797653	KF797716	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714081	KF797528	KF797591	KF797465	KF797654	KF797717	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714089	KF797529	KF797592	KF797466	KF797655	KF797718	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714096	KF797530	KF797593	KF797467	KF797656	KF797719	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714105	KF797531	KF797594	KF797468	KF797657	KF797720	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.1	DLS100714110	KF797532	KF797595	KF797469	KF797658	KF797721	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.2	DLS100714111	KF797533	KF797596	KF797470	KF797659	KF797722	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.3	DLS100714117	KF797534	KF797597	KF797471	KF797660	KF797723	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.3	DLS100714131	KF797535	KF797598	KF797472	KF797661	KF797724	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.4	DLS100714123	KF797536	KF797599	KF797473	KF797662	KF797725	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714128	KF797537	KF797600	KF797474	KF797663	KF797726	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714144	KF797538	KF797601	KF797475	KF797664	KF797727	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714154	KF797539	KF797602	KF797476	KF797665	KF797728	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714169	KF797540	KF797603	KF797477	KF797666	KF797729	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714179	KF797541	KF797604	KF797478	KF797667	KF797730	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714181	KF797542	KF797605	KF797479	KF797668	KF797731	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714207	KF797543	KF797606	KF797480	KF797669	KF797732	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714208	KF797544	KF797607	KF797481	KF797670	KF797733	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714214	KF797545	KF797608	KF797482	KF797671	KF797734	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714231	KF797546	KF797609	KF797483	KF797672	KF797735	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714244	KF797547	KF797610	KF797484	KF797673	KF797736	DLS
Noctuidae	Hypeninae	<i>Hypena</i> sp.5	DLS100714247	KF797548	KF797611	KF797485	KF797674	KF797737	DLS



Noctuidae	Hypeninae	Hypena sp.5	DLS100714253	KF797549	KF797612	KF797486	KF797675	KF797738	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714257	KF797550	KF797613	KF797487	KF797676	KF797739	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714261	KF797551	KF797614	KF797488	KF797677	KF797740	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714266	KF797552	KF797615	KF797489	KF797678	KF797741	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714279	KF797553	KF797616	KF797490	KF797679	KF797742	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714281	KF797554	KF797617	KF797491	KF797680	KF797743	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714314	KF797555	KF797618	KF797492	KF797681	KF797744	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714328	KF797556	KF797619	KF797493	KF797682	KF797745	DLS
Noctuidae	Hypeninae	Hypena sp.5	DLS100714351	KF797557	KF797620	KF797494	KF797683	KF797746	DLS
Noctuidae	Hypeninae	Hypena sp.6	DLS100714174	KF797558	KF797621	KF797495	KF797684	KF797747	DLS
Noctuidae	Hypeninae	Hypena sp.7	DLS100714176	KF797559	KF797622	KF797496	KF797685	KF797748	DLS
Noctuidae	Hypeninae	Hypena sp.7	DLS100714260	KF797560	KF797623	KF797497	KF797686	KF797749	DLS
Noctuidae	Hypeninae	Hypena squalida	DLS100714083	KF797561	KF797624	KF797498	KF797687	KF797750	DLS
Noctuidae	Hypeninae	Hypena squalida	DLS100714124	KF797562	KF797625	KF797499	KF797688	KF797751	DLS
Noctuidae	Hypeninae	Hypena squalida	DLS100714148	KF797563	KF797626	KF797500	KF797689	KF797752	DLS
Noctuidae	Hypeninae	Hypena squalida	DLS100714166	KF797564	KF797627	KF797501	KF797690	KF797753	DLS
Noctuidae	Hypeninae	Hypena squalida	DLS100714173	KF797565	KF797628	KF797502	KF797691	KF797754	DLS
Noctuidae	Hypeninae	Hypena squalida	DLS100714273	KF797566	KF797629	KF797503	KF797692	KF797755	DLS
Noctuidae	Hypeninae	Hypena squalida	DLS100714334	KF797567	KF797630	KF797504	KF797693	KF797756	DLS
Noctuidae	Hypeninae	Hypena rivuligera	BHS100704018	KF797579	KF797642	KF797505	KF797704	KF797768	BHS
Noctuidae	Hypeninae	Hypena stygiana	BHS100703072	KF797576	KF797639	KF797506	KF797702	KF797765	BHS
Noctuidae	Hypeninae	Hypena stygiana	BHS100703246	KF797577	KF797640	KF797507	KF797703	KF797766	BHS
Noctuidae	Hypeninae	Hypena stygiana	WLS100722081	KF797578	KF797641	KF797508	KF797705	KF797767	WLS
Noctuidae	Hypeninae	Hypena kengkalis	BHS100703096	KF797569	KF797632	KF797509	KF797695	KF797758	BHS
Noctuidae	Hypeninae	Hypena kengkalis	BHS100705124	KF797568	KF797631	KF797510	KF797694	KF797757	BHS
Noctuidae	Hypeninae	Hypena kengkalis	LJZ100813106	KF797570	KF797633	KF797511	KF797696	KF797759	LJZ
Noctuidae	Hypeninae	Hypena tristalis	BHS100704002	KF797572	KF797635	KF797512	KF797698	KF797761	BHS
Noctuidae	Hypeninae	Hypena tristalis	BHS100705023	KF797573	KF797636	KF797513	KF797699	KF797762	BHS
Noctuidae	Hypeninae	Hypena tristalis	BHS100705066	KF797574	KF797637	KF797514	KF797700	KF797763	BHS
Noctuidae	Hypeninae	Hypena tristalis	LJZ100726556	KF797575	KF797638	KF797515	KF797701	KF797764	LJZ
Noctuidae	Hypeninae	Hypena tristalis	WLS100722349	KF797571	KF797634	KF797516	KF797697	KF797760	WLS

**DLS - Dongling mountain, BHS - Baihua mountain, WLS - Wuling mountain, LJZ - Longjiazhuang**