

Increase in the number of Endangered Butterfly species in Japan from 1991 to 2012

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Summary : We surveyed the changes in the numbers of endangered species of Japanese butterflies from 1991 to 2012 on the basis of the Red Data Book and the Red List published by the Ministry of Environment. Total 47 butterflies were red listed in 1991, increasing to 91 species (including sub-species) in 2012. The rate of critically endangered (CR) and endangered (EN) species was the highest for butterflies (from two species in 1991 to 30 in 2012) in other category species. Thirty-seven species of the Lycaeidae family are currently included in the Red List (40.7%). Thirty species (42.3%) of the 71 butterfly species (not including sub-species) in the Japanese Red List are found in Korea. From all the Red List butterflies, 50.5% are grassland species.

Key word : endangered butterflies, Red Data Book, Red List, Ministry of Environment, grassland butterflies

Introduction

During the United Nations Conference on Environment and Development (UNCED) held in 1992 (Earth Summit), the “Convention on Biological Diversity (CBD)” was signed by 157 nations. CBD is a global agreement addressing all aspects of biological diversity: genetic resources, species, and ecosystems¹⁾.

The International Union for Conservation of Nature and Natural Resources (IUCN) published for the first time in 1966 the Red Data Book with the two volumes on endangered mammals and birds. The situation of endangered wildlife at the time was summarized into this book for the preservation of biodiversity¹⁰⁾. The Red Data Book has no legal implications but serves as the scientific basis for the promotion of endangered wildlife conservation⁷⁾.

In Japan, the first Threatened Wildlife of Japan-Red Data Book was published in 1991 by the Ministry of Environment (the Environment Agency at that time). This first edition of animals incorporated 697 species, including 209 species of

insects²⁾. The 2nd revision of the Red List species was performed in the year 2000, the 3rd revision was released in 2007 (insects), and the 4th revision was released in 2012 (insects)^{6,7)}.

In this study, we surveyed the changes in the recorded endangered species of Japanese butterflies from 1991 to 2012 on the basis of the Red Data Book and the Red List published by the Ministry of Environment. We also discussed about the endangered butterflies distributed both in Japan and Korea.

Red List Categories

The IUCN Red List of Threatened species, published in October 1996, was the first Red List adopting the revised Red List Categories⁴⁾. The Red List of insects in Japan was published four times between 1991 and 2012. In this study, we used the Red List Categories considered as the 4th Red Data, the Threatened Wildlife of Japan-Red Data-Revised Edition published by the Ministry of the Environment in 2012, and outlined as follows: Extinct (EX), species thought to be extinct in Japan; Extinct in the Wild (EW), species found only in captivity or cultivation; Threatened, species facing a risk of extinction. These are

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Table 1 The number of Red List insect species (including subspecies) by Ministry of the Environment of Japan from 1991 to 2012

Edition of Red List	Year	Category*							Total	No. of target species
		EX	EW	CR+EN	VU	NT	DD	LP		
1st	1991	2	0	24	16	166	-	1	209	30000
2nd	2000	2	0	63	76	161	87	3	392	30000
3rd	2007	3	0	110	129	200	122	2	566	30000
4th	2012	4	0	171**	187	353	153	2	870	32000

*EX : Extinct, EW : Extinct in the Wild, CR : Critically Endangered, EN : Endangered, VU : Vulnerable, NT : Near Threatened, DD : Data Deficient, LP : Threatened Local Population

**CR : 65 species, EN : 106 species

Table 2 The number of Red List butterfly species (including subspecies) by Ministry of the Environment of Japan from 1991 to 2012

Edition of Red List	Year	Category*							Total	No. of target species
		EX	EW	CR+EN	VU	NT	DD	LP		
1st	1991	0	0	2	5	40	-	0	47	250
2nd	2000	0	0	14	24	40	0	0	78	250
3rd	2007	0	0	18	27	44	1	0	90	250
4th	2012	0	0	30**	16	44	1	0	91	250

*See Fig. 1 ; **CR : 13 species, EN : 17 species

divided into three subcategories :

Threatened I (CR+EN) : whenever numerical assessment is possible, species under the category of Threatened I will be divided into the two categories :

Threatened IA, Critically Endangered (CR) : facing an extremely high risk of extinction in the wild.

Threatened IB : Endangered (EN) : facing a very high risk of extinction in the wild.

Threatened II, Vulnerable (VU) : species facing a high risk of extinction.

Near Threatened (NT) : species being close to qualifying for or are likely to qualify for a threatened category in the near future.

Data Deficient (DD) : inadequate information to make a direct or indirect assessment of its risk of extinction on the basis of its distribution and/or population status.

Locally Threatened Population (LP) : species facing a difficulty in maintaining a viable population.

Changes in the number of insects in the Red List

Table 1 shows the number of species (including

subspecies and local populations) of Red List insects compiled by the Japanese Ministry of Environment between 1991 and 2012. The IUCN usually adopts the term “taxon” as species and subspecies are included in the Red List. For simplification we used the term “species” with regard to subspecies and local populations. Total 209 species of insects were listed in 1991 from 30,000 target species. The Red List of insects increased to 392 species in 2000 and increased again to 870 species in 2012. The number of Red List insects increased 4.16-fold over a period of 21 years.

Over the same period, the number of VU species increased 11.7-fold (from 16 species in 1991 to 187 in 2012) and CR+EN species increased 7.1-fold (from 24 species 1991 to 171 in 2012). Although the percentage of Red List insects in relation to the total number of species targeted was 0.7% in 1991, it increased to 2.7% in 2012.

Table 2 shows the number of butterfly species included in the Red List compiled by the Japanese Ministry of Environment from 1991 to 2012. A total of 47 butterflies were red listed in 1991, with this number increasing to 90 species (1.91-fold increase) in 2007. Only one species, *Glaucopsyche*

Table 3 The number of Red List butterflies in each family by Ministry of the Environment in 2012

Family	Category*					Total (including subspecies)	Total of family/sum of total (%)	No. of species (A)	No. of target species (B)	A/B (%)
	CR	EN	VU	NT	DD					
Papilionidae	0	0	1	3	0	4	4.4	3	21	14.3
Pieridae	0	3	1	4	0	8	8.8	6	23	26.1
Lycaeidae	7	8	7	14	1	37	40.7	26	70	37.1
Nymphalidae	3	1	3	7	0	14	15.4	13	53	24.5
Satyridae	2	2	1	11	0	16	17.6	13	28	46.4
Hesperiidae	1	3	3	5	0	12	13.2	10	36	27.8
Danaidae	0	0	0	0	0	0	0.0	0	5	0.0
Libytheidae	0	0	0	0	0	0	0.0	0	1	0.0
Total	13	17	16	44	1	91	100	71	237	30.0

*See Fig. 1

lycornas (Lycaeidae), distributed in Hokkaido was added to the Red List in 2012⁹⁾.

The number of species categorized as CR+EN category increased 15.0-fold (from two species in 1991 to 30 in 2012), and those categorized as VU increased 3.1-fold (from five species in 1991 to 16 in 2012). The number of NT species barely increased over the same period. From 2007 to 2012, 12 species were added to the CR+EN category. In contrast, a decrease by 11 species was observed in the VU category. This shows that the risk of extinction for threatened butterflies is evolving from high in the direction to very high or extremely high.

Butterfly species in each family in the Red List

Table 3 shows the number of butterfly species in each family included in the Red List compiled by the Japanese Ministry of Environment in 2012. The Lycaeidae family includes 37 Red List butterflies (40.7%). Because this Red List butterflies included both species and subspecies, we only considered the number of species and showed the percentages in relation to the number of target species within the family. The Satyridae family had the highest percentage of endangered species (46.4%), followed by the Lycaeidae family with 37.1% of endangered species. Fig. 1 shows an adult specimen of *Coenonympha oedippus annulifer*, a critically endangered (CE) species from the Satyridae family.

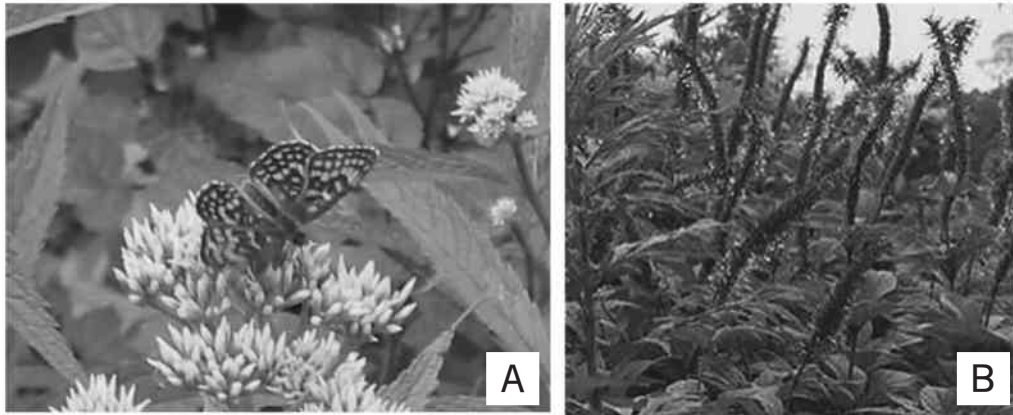
The Nymphalidae family includes 14 red-listed



Fig. 1 *Coenonympha oedippus annulifer*, one of the Critically Endangered (CE) species of the Satyridae family. (Shiojiri City, July 17, 2005).

butterflies. Three species of the Melitaeini tribe in Nymphalidae are found in Japan, *Melitaea scotosia* (CR), *M. protomedia* (CR), and *M. ambigua nippona* (EN), all of which are categorized as Threatened I endangered species. We investigated the annual change in the numbers of adult *M. ambigua nippona* at the Mibu River in Nagano Prefecture, where this species is mainly distributed and it is categorized as an endangered species (VU)⁸⁾. In 2002, we found a large number of adults and its food plant, *Veronicastrum sibiricum* as shown in Fig. 2. In 2009, neither the butterfly nor the plant was present in the same area, primarily because of overexploitation of *V. sibiricum* by the Sika deer *Cervus nippon*. Afterwards, *M. ambigua nippona* also disappeared at this area, and a similar case was reported at Nikko in Tochigi Prefecture, Japan³⁾.

2002 - 2003



2009 - 2010

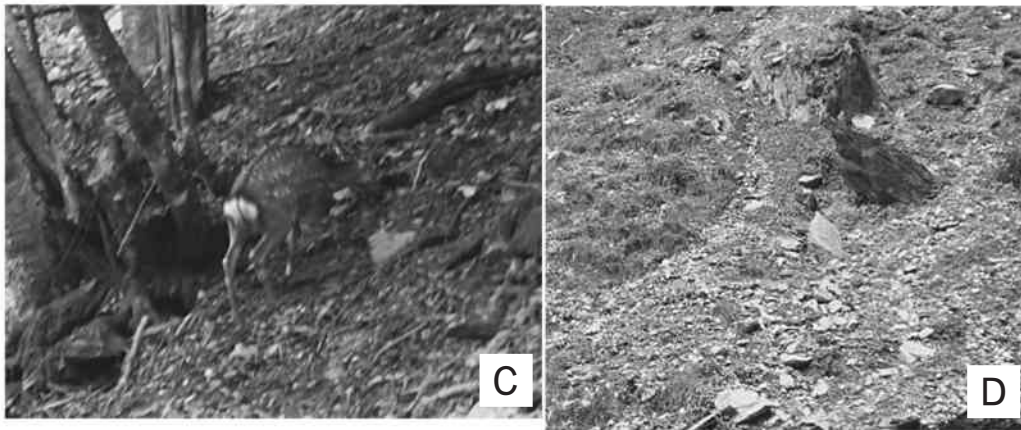


Fig. 2 Extinction of *Mellicta ambigua niphona* (Nymphalidae) at the Mibu river area of Ina City in Nagano Prefecture. A: Adult of *M. ambigua niphona* (July 17, 2003). B: Food plant, *Veronicastrum sibiricum* subsp. *japonicum* (July 12, 2002). C: Sika deer eating grass (September 10, 2010). D: Grassless area injured by Sika deer (September 4, 2009).

Table 4 The number of Japanese Red List butterflies (not including subspecies) distributed in Korea

Family	No. of Japanese Red List species (A)	No. of species in Korea (B)	B/A (%)
Papilionidae	3	1	33.3
Pieridae	6	2	33.3
Lycaeidae	26	10	38.5
Nymphalidae	13	7	53.8
Satyridae	13	4	30.8
Hesperiidae	10	6	60.0
Total	71	30	42.3

Korean butterflies included in the Japanese Red List

Table 4 shows the number of red-listed

Japanese butterflies, which are also found in Korea. We compared this list with the relation of Korean species included in the Korean Butterfly Atlas (1996-2011)⁵⁾ and found that 30 species (42.

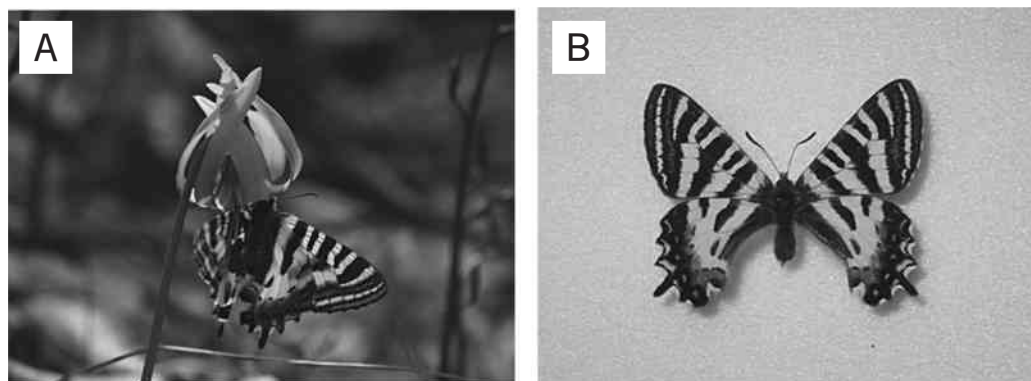


Fig. 3 *Luehdorufia puziloi* (NT) distributed in Korea and Japan. A : Male adult (Minamiminowa Village, April 22, 2008). B : Specimen in Laboratory of Insect Ecology AFC possession.

Table 5 The number of Red List butterflies (including subspecies) in each habitat by Ministry of the Environment in 2012

Habitat		Category*					Total
		CR	EN	VU	NT	DD	
Forest	No.	4	2	5	17	1	29
	(%)	30.8	11.8	31.3	38.6	100.0	31.9
Grassland	No.	8	15	8	15	0	46
	(%)	61.5	88.2	50.0	34.1	0.0	50.5
Alpine	No.	1	0	3	12	0	16
	(%)	7.7	0.0	18.8	27.3	0.0	17.6
Total	No.	13	17	16	44	1	91
	(%)	100	100	100	100	100	100

*See Fig. 1

3%) of the 71 red-listed Japanese butterflies (not including sub-species) are found in Korea. The percentage was particularly high for the families Nymphalidae and Hesperidae. Most of the Threatened I (CR+EN) species were distributed both in Japan and Korea (Appendix). One example is *Luehdorufia puziloi* (NT), which is distributed in both Korea and Japan (Fig. 3). In contrast, *Luehdorufia japonica* (VU), from the same genus, is only found in Japan⁹.

Crisis on the grassland butterflies

We classified the red-listed butterflies into three habitat categories: forest, grassland, and alpine species (Table 5). Grassland species presented the highest percentage of endangered species (50.5%). In fact, grassland butterflies accounted for the 61.5% of the total number of the CR category species and 88.2% in the EN category. This shows

that grassland environments preferred by butterflies, such as *Shijimiaeoides divinus*, *Maculinea teleius*, *Plebejus subsolanus*, *Pyrgus maculatus*, and *Hesperia florinda* (Appendix), will disappear in Japan.

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日本における1991年から2012年までの絶滅危惧チョウ類の増加

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要 約

1991年から2012年の間に環境省が公表したレッドデータブックとレッドリストを基に、日本の絶滅危惧チョウ類の種数の変化を分析した。1991年にはレッドリストに指定されたチョウ類は47種であったが、2012年には亜種を含めると91種に増加した。絶滅危惧 I 類 (CR+EN) の種数は、1991年の 2 種から2012年の30種となり、他のカテゴリーランクに比べて最も増加率が高くなった。科別に見ると37種のシジミチョウがレッドリスト種に指定され、全体の40.7%となり最も種数が多かった。亜種を除いた日本のレッドリスト71種のチョウ類のうち、42.3%にあたる30種が韓国にも生息していた。レッドリスト種の50.5%が草原に生息するチョウ類であった。

キーワード：絶滅危惧チョウ類，レッドデータブック，レッドリスト，環境省，草原性チョウ類

Appendix Change of category rank in Red List butterflies in Japan from 1991 to 2012

No.	Japanese name	Scientific name	Family	2012*	2007	2000	1991	Korea**	Habitat
1	ウスイロオナガシジミ九州亜種	<i>Antigius butleri kurinodakensis</i>	Lycacidae	CR	CR+EN			●	Forest
2	オガサワラシジミ	<i>Celastrina ogasawarensis</i>	Lycacidae	CR	CR+EN	CR+EN	NT		Forest
3	タイワンツバメシジミ南西諸島亜種	<i>Everes lacturnus lacturnus</i>	Lycacidae	CR	CR+EN	CR+EN	NT		Grassland
4	キタアカシジミ冠高原亜種	<i>Japonica onoi mizobei</i>	Lycacidae	CR	CR+EN	CR+EN		●	Forest
5	ゴマシジミ本州中部亜種	<i>Maculinea teleius kazamoto</i>	Lycacidae	CR ↑	VU	-	-	●	Grassland
6	ゴイシツバメシジミ	<i>Shijimia moorei moorei</i>	Lycacidae	CR	CR+EN	CR+EN	CR+EN		Forest
7	オオルリシジミ本州亜種	<i>Shijimacoides divinus barine</i>	Lycacidae	CR	CR+EN	CR+EN	NT	●	Grassland
8	ウスイロヒョウモンモドキ	<i>Melitaea protomedia</i>	Nymphalidae	CR	CR+EN	CR+EN		●	Grassland
9	ヒョウモンモドキ	<i>Melitaea scotosia</i>	Nymphalidae	CR	CR+EN	CR+EN	VU	●	Grassland
10	オオウラギンヒョウモン	<i>Fabriciana nerippe</i>	Nymphalidae	CR	CR+EN	CR+EN	CR+EN		Grassland
11	ヒメヒカゲ本州中部亜種	<i>Coenonympha oedippus annulifer</i>	Satyridae	CR	CR+EN	VU	NT	●	Grassland
12	タカネヒカゲハヶ岳亜種	<i>Oeneis norna sugitanii</i>	Satyridae	CR	CR+EN	VU	VU		Alpine
13	ヒメチャマダラセセリ	<i>Pyrgus malvae malvae</i>	Hesperiidae	CR ↑	VU	VU	NT	●	Grassland
14	ヒメシロチョウ	<i>Leptidea amurensis</i>	Pieridae	EN ↑	VU	VU		●	Grassland
15	ツマグロキチョウ	<i>Eurema laeta betheseba</i>	Pieridae	EN ↑	VU	VU		●	Grassland
16	ヤマキチョウ	<i>Gonepteryx rhamni maxima</i>	Pieridae	EN ↑	VU	NT			Forest
17	タイワンツバメシジミ本土亜種	<i>Everes lacturnus kawaii</i>	Lycacidae	EN	CR+EN	CR+EN	NT		Grassland
18	ゴマシジミ中国・九州亜種	<i>Maculinea teleius daisensis</i>	Lycacidae	EN ↑	VU	-	-	●	Grassland
19	クロシジミ	<i>Niphanda fusca</i>	Lycacidae	EN	CR+EN	CR+EN	NT		Grassland
20	ミヤマシジミ	<i>Plebejus argyrognomon praeterinsularis</i>	Lycacidae	EN ↑	VU	VU		●	Grassland
21	アサマシジミ北海道亜種	<i>Plebejus subsolanus iburiensis</i>	Lycacidae	EN ↑	VU	VU		●	Grassland
22	アサマシジミ中部低地帯亜種	<i>Plebejus subsolanus yaginus</i>	Lycacidae	EN ↑	VU	VU		●	Grassland
23	オオルリシジミ九州亜種	<i>Shijimacoides divinus asonoi</i>	Lycacidae	EN	CR+EN	CR+EN	NT	●	Grassland
24	シルビアシジミ	<i>Zizina melina</i>	Lycacidae	EN	CR+EN	CR+EN		●	Grassland
25	コヒョウモンモドキ	<i>Melitaea ambigua nippona</i>	Nymphalidae	EN ↑	VU	VU		●	Grassland
26	ヒメヒカゲ本州西部亜種	<i>Coenonympha oedippus arothius</i>	Satyridae	EN	CR+EN	VU	NT	●	Grassland
27	クロヒカゲモドキ	<i>Lethe marginalis</i>	Satyridae	EN ↑	VU	VU		●	Forest
28	チャマダラセセリ	<i>Pyrgus maculatus maculatus</i>	Hesperiidae	EN	CR+EN	CR+EN	NT	●	Grassland
29	ホシチャバネセセリ	<i>Aeromachus inachus inachus</i>	Hesperiidae	EN	CR+EN	VU		●	Grassland
30	アカセセリ	<i>Hesperia florinda florinda</i>	Hesperiidae	EN ↑	VU	VU		●	Grassland
31	ギフチョウ	<i>Luehdorfia japonica</i>	Papilionidae	VU	VU	VU	VU		Forest
32	ミヤマシロチョウ	<i>Aporia hippia japonica</i>	Pieridae	VU	VU	VU	NT		Forest
33	チョウセンアカシジミ	<i>Coreana raphaelis yamamotoi</i>	Lycacidae	VU	VU	VU	NT	●	Forest
34	キタアカシジミ北日本亜種	<i>Japonica onoi onoi</i>	Lycacidae	VU	VU	VU			Forest
35	ゴマシジミ八方尾根・白山亜種	<i>Maculinea teleius hosono</i>	Lycacidae	VU	VU			●	Grassland
36	ルーミスシジミ	<i>Panchala ganesa loomis</i>	Lycacidae	VU	VU	VU			Grassland
37	ツシマウラボシシジミ	<i>Pithecopis fulgens tsushimanus</i>	Lycacidae	VU ↑	NT	NT	NT		Forest
38	アサマシジミ中部高地帯亜種	<i>Plebejus subsolanus yarigadakeanus</i>	Lycacidae	VU	VU	VU		●	Alpine
39	ハマヤマトシジミ	<i>Zizeeria karsandra</i>	Lycacidae	VU	VU	NT			Grassland
40	ウラギンシジミヒョウモン	<i>Argyrognome laodice japonica</i>	Nymphalidae	VU ↑	NT				Grassland
41	ヒョウモンチョウ本州中部亜種	<i>Brenthis daphne rabdia</i>	Nymphalidae	VU ↑	NT	NT		●	Grassland
42	オオイチョウ	<i>Limenitis populi jezoensis</i>	Nymphalidae	VU	VU	VU	NT	●	Alpine
43	ウラナミジャノメ本土亜種	<i>Ypthima multistriata nipponica</i>	Satyridae	VU	VU	VU		●	Grassland
44	タカネキマダラセセリ南アルプス亜種	<i>Carterocephalus palaemon abashianus</i>	Hesperiidae	VU	VU	NT	NT		Alpine
45	アサヒナキマダラセセリ	<i>Ochlodes asahinai</i>	Hesperiidae	VU	VU	VU	NT		Grassland
46	オガサワラセセリ	<i>Parnara ogasawarensis</i>	Hesperiidae	VU	VU	NT	NT		Grassland
47	ヒメギフチョウ本州亜種	<i>Luehdorfia puziloi inexpecta</i>	Papilionidae	NT	NT	NT	NT	●	Forest
48	ヒメギフチョウ北海道亜種	<i>Luehdorfia puziloi yessoensis</i>	Papilionidae	NT	NT	NT	NT	●	Forest
49	ウスバキチョウ	<i>Parnassius eversmanni daisetsuzamus</i>	Papilionidae	NT	NT	NT	NT		Alpine
50	ミヤマモンキチョウ浅間山系亜種	<i>Colias palaeno aias</i>	Pieridae	NT	NT	NT	NT		Alpine
51	ミヤマモンキチョウ北アルプス亜種	<i>Colias palaeno sugitanii</i>	Pieridae	NT	NT	NT	NT		Alpine
52	クモツマキチョウハヶ岳・南アルプス亜種	<i>Anthocharis cardamines hayashii</i>	Pieridae	NT	NT	NT	NT		Alpine
53	クモツマキチョウ北アルプス・戸隠亜種	<i>Anthocharis cardamines issykkii</i>	Pieridae	NT	NT	NT	NT		Alpine
54	イワカワシジミ	<i>Artipe eryx okinawana</i>	Lycacidae	NT	NT	NT	NT		Forest
55	ベニモンカラスシジミ四国亜種	<i>Fixsenia iyonis iyonis</i>	Lycacidae	NT	NT	NT	NT		Forest
56	ベニモンカラスシジミ中国亜種	<i>Fixsenia iyonis kibiensis</i>	Lycacidae	NT	NT	NT	NT		Forest
57	ベニモンカラスシジミ中部亜種	<i>Fixsenia iyonis surugaensis</i>	Lycacidae	NT	NT	NT	NT		Forest
58	カバイロシジミ	<i>Glaucopsyche lycornas</i>	Lycacidae	NT ○					Grassland
59	オオゴマシジミ	<i>Maculinea arionides takamukui</i>	Lycacidae	NT	NT	NT		●	Forest
60	ゴマシジミ北海道・東北亜種	<i>Maculinea teleius ogumae</i>	Lycacidae	NT ↓	VU			●	Grassland
61	リュウキュウウラボシシジミ	<i>Pithecopis corvus ryukyuensis</i>	Lycacidae	NT	NT	NT	NT		Forest
62	ヒメシジミ本州・九州亜種	<i>Plebejus argus micrargus</i>	Lycacidae	NT	NT	NT		●	Grassland
63	キマダラルリツバメ	<i>Spindasis takanonis</i>	Lycacidae	NT	NT	NT	NT	●	Forest
64	クロツバメシジミ九州沿岸・朝鮮半島亜種	<i>Tongeia fischeri caudalis</i>	Lycacidae	NT	NT	-	-	●	Grassland
65	クロツバメシジミ東日本亜種	<i>Tongeia fischeri japonica</i>	Lycacidae	NT	NT	-	-	●	Grassland
66	クロツバメシジミ西日本亜種	<i>Tongeia fischeri shojii</i>	Lycacidae	NT	NT	-	-	●	Grassland
67	カラフトルリシジミ	<i>Vaccinina optilele daisetsuzana</i>	Lycacidae	NT	NT	NT	NT		Alpine
68	コノハチョウ	<i>Kallima inachus eucerca</i>	Nymphalidae	NT	NT	NT	NT		Forest
69	ヒョウモンチョウ東北以北亜種	<i>Brenthis daphne iwatensis</i>	Nymphalidae	NT	NT	NT		●	Grassland
70	アサヒヒョウモン	<i>Clossiana freija asahidakeana</i>	Nymphalidae	NT	NT	NT	NT		Grassland
71	カラフトヒョウモン	<i>Clossiana iphigenia</i>	Nymphalidae	NT	NT				Grassland
72	フタオチョウ	<i>Polyura eudamippus weismanni</i>	Nymphalidae	NT	NT	NT	NT		Forest
73	アカボシゴマダラ奄美亜種	<i>Hestina assimilis shirakii</i>	Nymphalidae	NT	NT	NT	NT	●	Forest
74	オオムラサキ	<i>Sasakia charonda charonda</i>	Nymphalidae	NT	NT	NT	NT	●	Forest
75	シロオビヒメヒカゲ札幌周辺亜種	<i>Coenonympha hero neoperseis</i>	Satyridae	NT	NT			●	Grassland
76	クモマベニヒカゲ北海道亜種	<i>Erebia ligea rishirizana</i>	Satyridae	NT	NT	NT	NT		Alpine
77	クモマベニヒカゲ本州亜種	<i>Erebia ligea takanonis</i>	Satyridae	NT	NT	NT	NT		Alpine
78	ベニヒカゲ本州亜種	<i>Erebia neriene nipponica</i>	Satyridae	NT	NT	NT			Alpine
79	キマダラモドキ	<i>Kirinia fentoni</i>	Satyridae	NT	NT	NT			Forest
80	シロオビヒカゲ	<i>Lethe europa pavida</i>	Satyridae	NT	NT				Grassland
81	ダイセツタカネヒカゲ	<i>Oeneis melissa daisetsuzana</i>	Satyridae	NT	NT	NT	NT		Alpine
82	タカネヒカゲ北アルプス亜種	<i>Oeneis norna asamana</i>	Satyridae	NT ↓	VU	VU	VU		Alpine
83	マサキウラナミシジミ	<i>Ypthima masakii</i>	Satyridae	NT	NT	NT	NT		Forest
84	リュウキュウウラナミシジミ	<i>Ypthima riukiwana</i>	Satyridae	NT	NT	NT	NT		Forest
85	ヤエヤマウラナミシジミ	<i>Ypthima yayeyamana</i>	Satyridae	NT	NT	NT	NT		Forest
86	タカネキマダラセセリ北アルプス亜種	<i>Carterocephalus palaemon satakei</i>	Hesperiidae	NT	NT	NT	NT		Alpine
87	ギンイチモンジセセリ	<i>Leptalina unicolor</i>	Hesperiidae	NT	NT	NT		●	Grassland
88	ヒメイチモンジセセリ	<i>Parnara bada</i>	Hesperiidae	NT	NT				Grassland
89	スジグロチャバネセセリ四国亜種	<i>Thymelicus leoninus hamadako</i>	Hesperiidae	NT	NT			●	Grassland
90	スジグロチャバネセセリ北海道・本州・九州亜種	<i>Thymelicus leoninus leoninus</i>	Hesperiidae	NT	NT	NT		●	Grassland
91	ヒメウラボシシジミ	<i>Neopithecopis zalmora zalmora</i>	Lycacidae	DD	DD				Forest

* ↑: Category rank up, ↓: Category rank down, ○: Newly rank in

** ●: Species distributed in Korea