

# A RETURN TO THE HENGDUAN MOUNTAINS OF CHINA

## with a list of newly recorded species from Sichuan and Yunnan

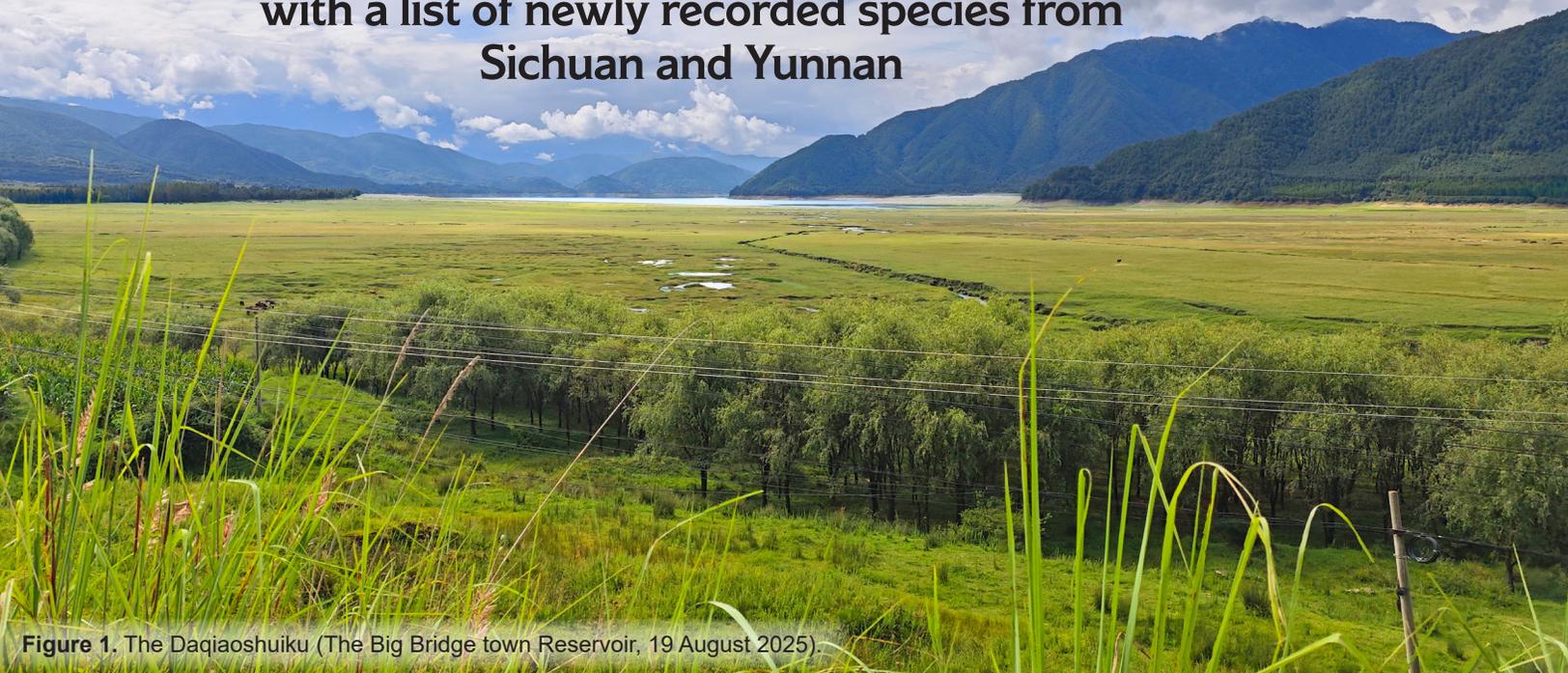


Figure 1. The Daqiaoshuiku (The Big Bridge town Reservoir, 19 August 2025)

by Xingyan Zhang, Junjian Li, Chuntian Zhang, Henan Li, Ruiqing Dong, Yang Tang and Xinyi Li

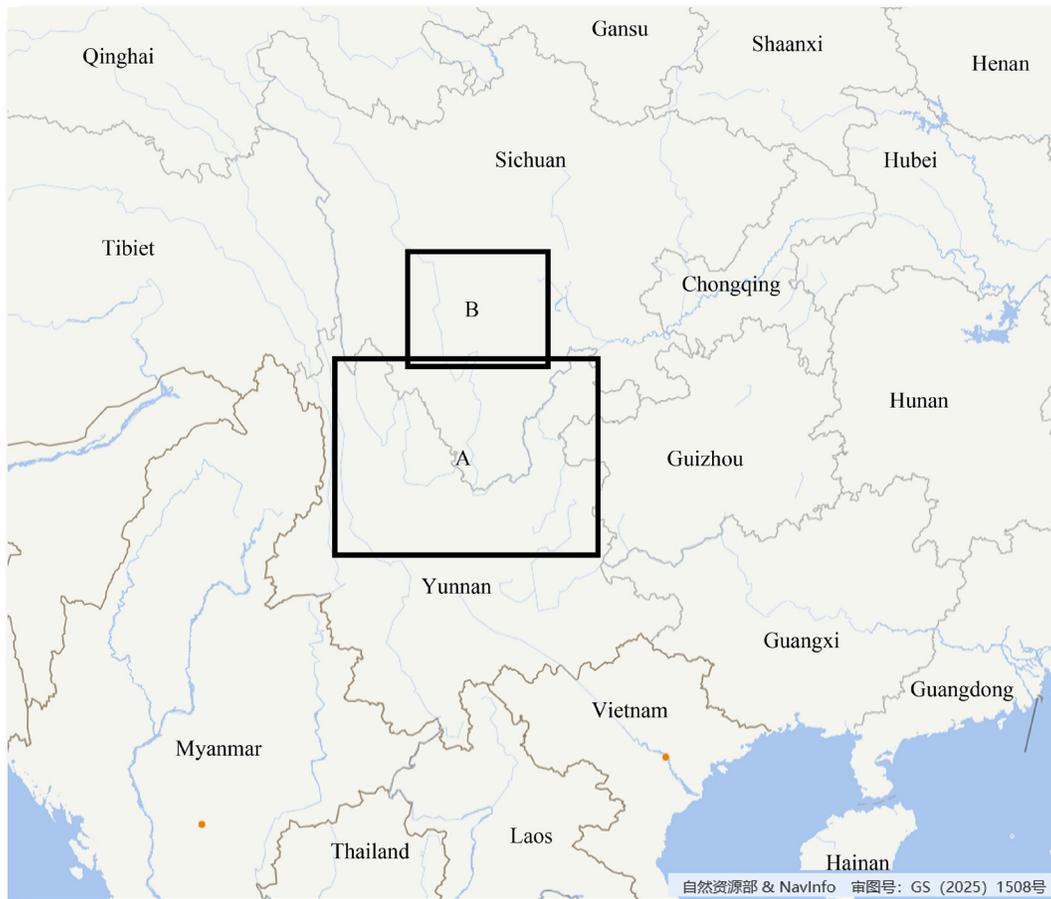
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Last summer we went to southwestern China to collect tachinid flies (Diptera: Tachinidae) under the support of the National Natural Science Foundation of China (NSFC) General Program (Grant No. 32470459). This fly family is the most diverse and ecologically important group of insect parasitoids except for the parasitic wasps of the Hymenoptera (Stireman et al. 2006). It is also among the most species-rich families of flies and has experienced a relatively recent adaptive radiation across the globe (Stireman et al. 2021).

We had the opportunity to return to the Hengduan Mountains last year, which are recognized as one of the world's 35 biodiversity hotspots (Boufford 2014). Two of us had visited the area previously (in 2017) and the tachinids collected during that expedition were reported on by Zhang et al. (2018).

We set off to the Hengduan Mountains in two groups. Group A consisted of Chuntian Zhang, Henan Li, Ruiqing Dong and Xinyi Li. They travelled in northwestern Yunnan Province and western Sichuan Province from 20 July to 6 August, 2025 (group A in Fig. 2). Group B consisted of Junjian Li, Yang Tang and Xingyan Zhang. They circled the Gongga Mountains in western Sichuan from 8–20 August (group B in Fig. 2). Our two groups collected 2100 tachinid specimens in total, belonging to 187 species. We provide some pictures below of the interesting species we collected in the Hengduan Mountains and give a checklist of the tachinid flies that are newly recorded (nr) at the province level.



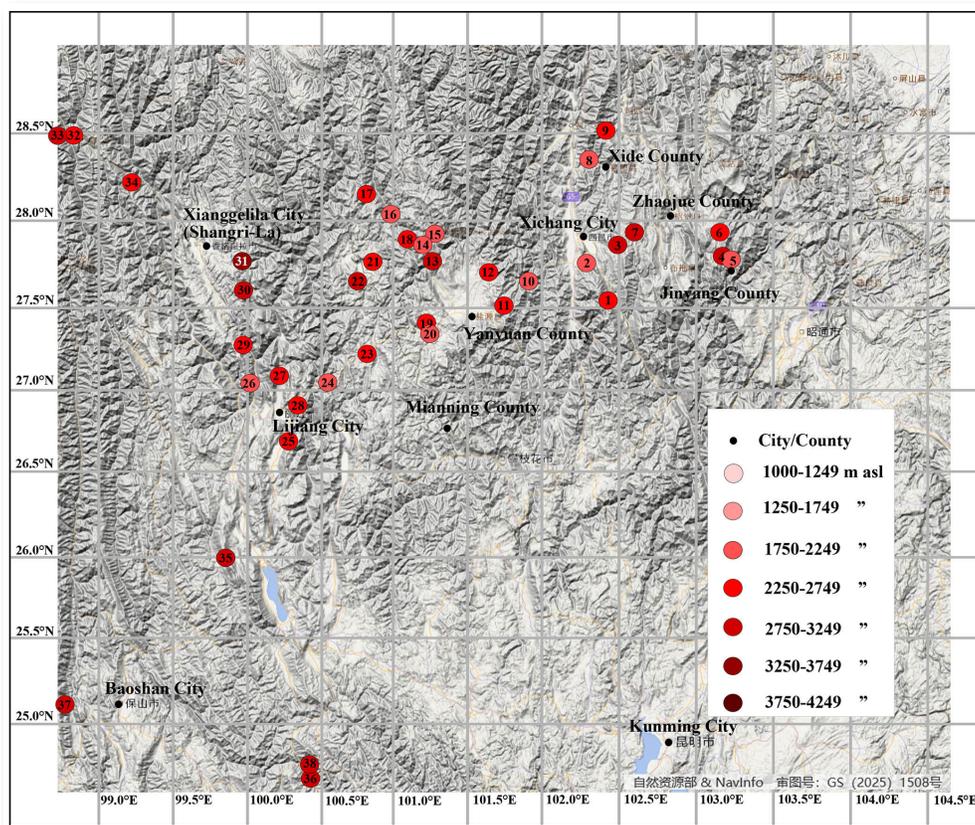
**Figure 2.** Map showing approximately where the two groups collected during the summer of 2025. Group A consisted of Chuntian Zhang, Henan Li, Ruiqing Dong and Xinyi Li. Group B consisted of Junjian Li, Yang Tang and Xingyan Zhang.

## THE HENGDUAN MOUNTAINS

The Hengduan Mountains Region (HDM) in southwestern China is characterized by a spectacular series of seven parallel high mountain ranges: Boshulaling–Gaoligong, Taniantaweng, Nushan, Mangkang–Yunling, Shanuli, Great Snow Mountains, and Qionglai–Minshan Mountains. These are separated by six deep valleys carved by fast-flowing rivers, including the Nujiang (Salween), Lancang (Mekong), Yangtze (Jinshajiang), Yalongjiang, Daduhe, and Minjiang, which run from north to south. The north mountain peaks are over 6000 m high and the valleys are 3000 m deep. As a result of both geography and climate, the northern HDM is generally cold and dry, and the southern HDM is warm and wet. Warm humid air from the Indian Ocean enters China through these river valleys. Climatic variation and rapid uplift-driven diversification over the last eight million years has resulted in the HDM becoming one of the most biologically diverse temperate forest ecosystems in the world. The insect fauna of the HDM is rich in endemic and alpine species, rich stenotopic species with distinct geographical replacement, and rich species derived from primitive groups.

## NORTHWESTERN YUNNAN PROVINCE

Yunnan is a province in southwestern China that is bordered by Laos and Vietnam to the south, northeastern Myanmar to the west, Tibet and Sichuan to the north, and Guizhou and Guangxi to the east. Northwestern Yunnan is located in the transition zone between the Qinghai-Tibet Plateau and the Yunnan-Guizhou Plateau. Here, the Nujiang, Lancang, and Jinsha rivers flow side by side, known as the “Three Parallel Rivers”, creating a complex landscape of high mountains and deep valleys. The dramatic elevation change, from 760 m in the Nujiang Valley to 6,740 m in the Meili Snow Mountains, forms vertical climate zones ranging from tropical to cold temperate and provides habitats for a diversity of species. Due to terrain isolation and the glacial refuge effect, many ancient and unique species have been preserved here, making it a cradle for species evolution. Northwestern Yunnan is at the heart of the Southwest Mountains hotspot region. Together with the Southeast Yunnan and West Guangxi hotspot region, it supports Yunnan’s status as China’s most biodiverse province. Its species density and uniqueness attract global attention, making it one of the richest regions in temperate flora and faunal diversity.



**Figure 3a.** Map showing the collecting localities of group A. The exact localities are given in Table A.

## SICHUAN PROVINCE

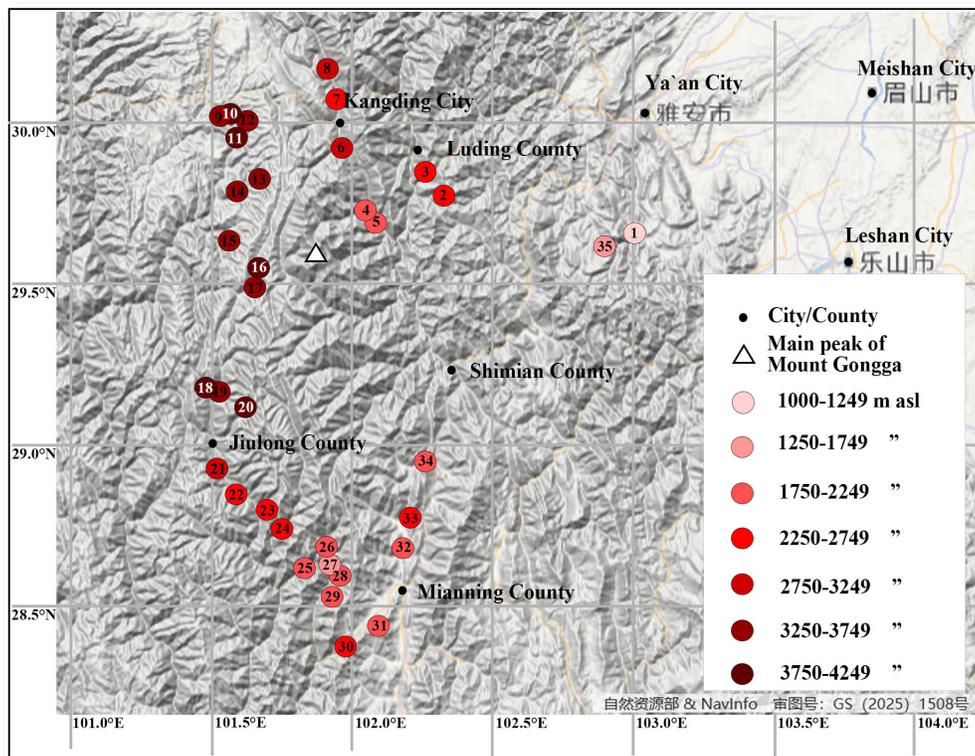
Sichuan is a province in southwestern China, situated in the upper reaches of the Yangtze River and historically known as the “Tianfuzhiguo (Land of Abundance)”. It is bordered by Tibet to the west, Chongqing and Guizhou to the east, Shaanxi, Gansu and Qinghai to the north, and Yunnan to the south. It is approximately 485,000 km<sup>2</sup> and in relative terms is larger than the state of California in the United States and slightly smaller than Spain. The province

has a resident population of about 83.67 million people, with a significant portion living in the capital metropolitan area of Chengdu and the rest mostly spread throughout the fertile Sichuan Basin in the eastern half of the province in smaller cities and towns, and in rural settlements.

## THE GONGGA MOUNTAINS

The Gongga Mountains (Minya Konka) are located in western Sichuan Province. They belong to the Great Snow Mountains and are culturally close to Tibet. They are the highest mountains in Sichuan, and reach a peak elevation of 7,508 m. Our collecting group did not go above 4,000 m for safety, and higher places appeared barren and may not contain much diversity. We started on the east side and collected specimens for 1–2 hours at each place. We usually started in the morning at about 9:00 a.m. and arrived at our first destination around 10:00 a.m. We usually collected for one hour before moving to another location to collect for the rest of the morning. The same routine was followed in the afternoon. We usually left for the next town at around 4:00 p.m. to look for dinner and accommodation.

The weather was foggy and rainy, and only 3 days of the journey were sunny. The city Ya’an by the side of Gongga is called ‘the city of rain’, and Gongga lived up to its name during our visit. It bothered us at first because our usual strategy was to find tachinids warming up or flying around in sunny places. We did not get good results at the beginning. But soon we found that sweeping is a good way to collect tachinids under such conditions and we were able to get a decent amount of them this way that could not be seen. They were mostly small ones but much better than nothing.



**Table A.** Localities where Group A collected. The numbers correspond with those on the dots in Figure 3a.

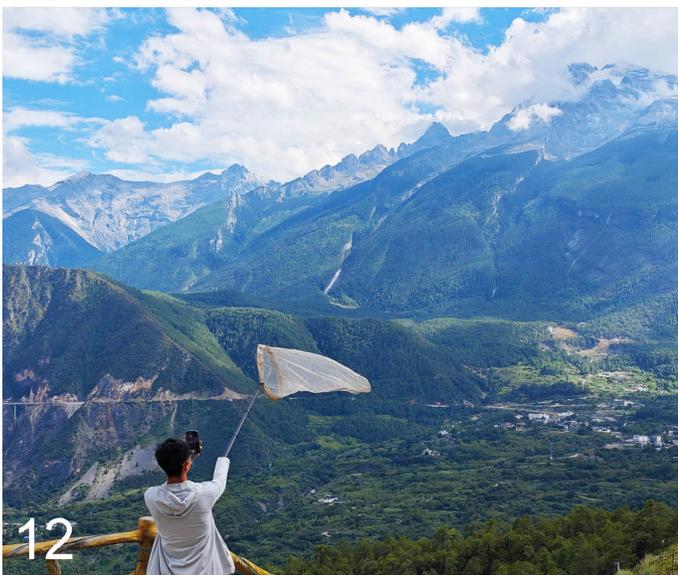
No.	Locality	Date (2025)
1	Mt. Luoji, Xichang City, Liangshan, Sichuan	20.VII
2	Qionghai, Xichang City, Liangshan, Sichuan	21.VII
3	Jiefanggou, Zhaojue County, Sichuan	21.VII
4	Baicaopo, Jinyang County, Liangshan, Sichuan	21.VII
5	Baicaopo, Jinyang County, Liangshan, Sichuan	22.VII
6	Bingdi town, Jinyang County, Sichuan	22.VII
7	Jiefanggou, Zhaojue County, Sichuan	22.VII
8	Mianshan town, Xide County, Sichuan	23.VII
9	Nanqing town, Yuexi County, Sichuan	23.VII
10	Pingchuan town, Yanyuan County, Sichuan	24.VII
11	Weicheng town, Yanyuan County, Sichuan	24.VII
12	Runyan town, Yanyuan County, Sichuan	24.VII
13	Mianya town, Yanyuan County, Sichuan	24.VII
14	Liewa town, Muli County, Sichuan	24.VII
15	Qiaowa town, Muli County, Sichuan	25.VII
16	Kangfu village, Keboxiang, Muli County, Sichuan	25.VII
17	The great Muli Monastery, Wachang, Muli County, Sichuan	25.VII
18	Housuo, Muli County, Sichuan	25.VII
19	Tianbazilu, Huangcao town, Yanyuan County, Sichuan	26.VII
20	Yantang town, Yanyuan County, Sichuan	26.VII
21	Lugu Lake, Yanyuan County, Sichuan	26.VII
22	Ning–Lu highway, Lijiang City, Yunnan	26.VII
23	Lijiang–Ninglang highway, Lijiang City, Yunnan	27.VII
24	Lijiang–Ninglang highway, Lijiang City, Yunnan	27.VII
25	Qihe town, Lijiang City, Yunnan	27.VII
26	Mt. Laojun, Shigu town, Lijiang City, Yunnan	28.VII
27	Yushuizhai, Baisha town, Lijiang City, Yunnan	28.VII
28	Mt. Jinhong, Lijiang City, Yunnan	29.VII
29	Hutiaoxia, Shangri-la City, Yunnan	29.VII
30	Haba Snow Mountains, Shangri-la City, Yunnan	30.VII
31	Jiantang town, Shangri-la City, Yunnan	31.VII
32	Yunling village, Mingyong Glacier, Deqin County, Yunnan	2.VIII
33	Mingyong Glacier, Deqing County, Yunnan	2.VIII
34	Baima Snow Mountains, Deqin County, Yunnan	3.VIII
35	Mt. Niaodiao, Eryuan County, Yunnan	4.VIII
36	Taibao Mountains, Longyang, Baoshan City, Yunnan	5.VIII
37	Mt. Baihualing, Longyang, Baoshan City, Yunnan	5.VIII
38	Taibao Mountains, Longyang, Baoshan City, Yunnan	6.VIII

**Table B.** Localities where Group B collected. The numbers correspond with those on the dots in Figure 3b.

<b>No.</b>	<b>Locality (the locality ending with 'cun' meas village)</b>	<b>Date (2025)</b>
1	Zhenggou, Wawushan, Hongya County, Ya'an City	8.VIII
2	Mt. Er'lang, Luding County	9. VIII
3	Mt. Niubei, Luding County	9. VIII
4	Mt. Daping, Yanzigou, Luding County	10.VIII
5	Nanmenguangou, Yanzigou town, Luding County	10.VIII
6	Laoyulin village, Yulin town, Kangding City	10.VIII
7	Qugong village, Yala, Kangding City	11.VIII
8	Wangmu village, Yala, Kangding City	11.VIII
9	Yingguan village, Waze, Kangding City	11.VIII
10	Sac. Mt. Jiangbu, Xiaba, Kangding City	12.VIII
11	Liqi village, Xiaba, Kangding City	12.VIII
12	Size village, Xiaba, Kangding City	12.VIII
13	Geridi village, Jiagenba, Kangding City	13.VIII
14	Lize village, Jiagenba, Kangding City	13.VIII
15	Shangchijixi village, Shade town, Kangding City	14.VIII
16	Waxiazhi, Gonggashan town, Kangding City	14.VIII
17	Shangmuju village, Gonggashan town, Kangding City	14.VIII
18	Temple Jiri, Tanggu village, Jiulong County	15.VIII
19	Tanggu village, Jiulong County	15.VIII
20	Lieta Lake, Tanggu village, Jiulong County	16.VIII
21	Chulonggou, Xiaer town, Jiulong County	16.VIII
22	Longxigou, Naiqu town, Jiulong County	16.VIII
23	Zigangpinggou, Naiqu town, Jiulong County	16.VIII
24	Xuewa town, Jiulong County	17.VIII
25	Duoluo, Jiulong County	17.VIII
26	Sanya town, Jiulong County	17.VIII
27	Luobosigou, Jiulong County	17.VIII
28	Hanjia village, Miansha town, Mianing County	18.VIII
29	Chongyuan village, Miansha town, Mianing County	18.VIII
30	Xiawu village, Ruoshui town, Mianing County	18.VIII
31	Xujiapuzi, Ruoshui town, Mianing County	18.VIII
32	Daqiao reservoir, Daqiao town, Mianing County (Fig. 1)	19.VIII
33	Dianzi village, Daqiao town, Mianing County	19.VIII
34	Liye Road, Liziping, Shimian County	19.VIII
35	Diecui Stream, Longcanggou, Yingjing County	20.VIII



**Figures 4–9.** Habitats in Sichuan (photos by Chuntian ZHANG of Group A). **4.** Qionghai, 21 July 2025. **5.** Bingdizhen, 22 July 2025. **6.** Yuexixian, 23 July 2025. **7, 8.** Road side at Li-Ning highway, 27 July 2025. **9.** Halfway to Shangri-La, 29 July 2025.



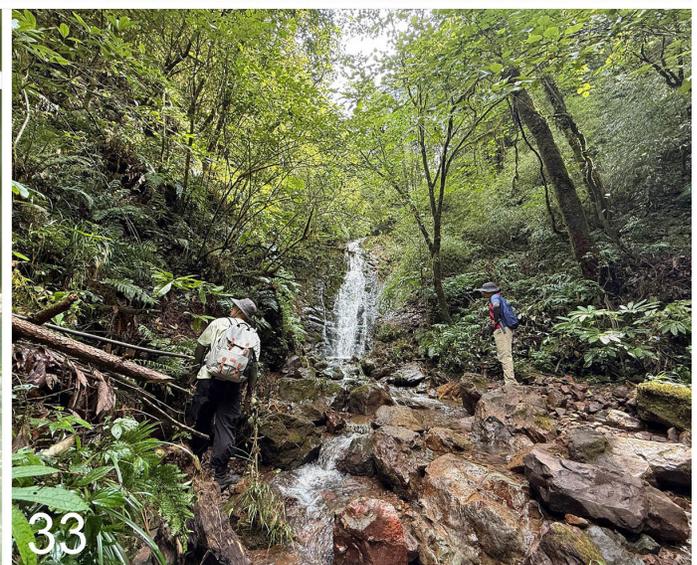
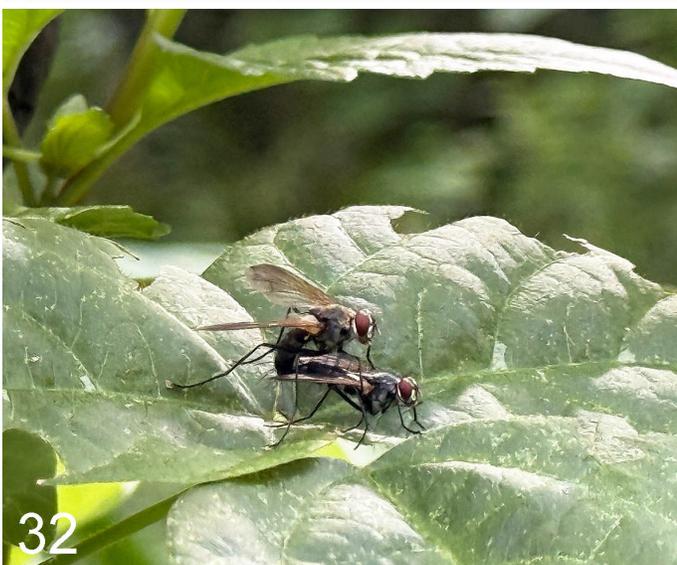
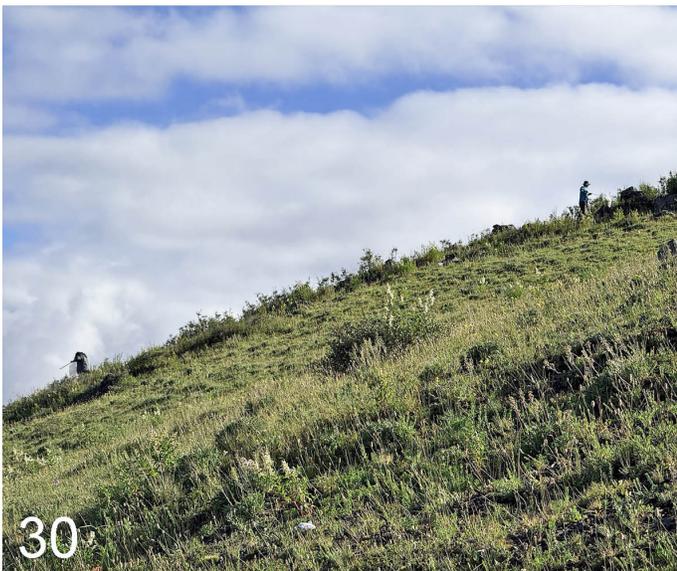
**Figures 10–15.** Fieldwork and local places (photos by Chuntian ZHANG). **10.** Ruiqing DONG collecting in Baicaoipo, Jinyang, Liangshan Prefecture, Sichuan, 22 July 2025. **11.** Henan LI and Ruiqing DONG collecting in Jiefanggou, Zhaojue, Liangshan Prefecture, Sichuan, 22 July 2025. **12.** Ruiqing DONG at Haba Snow Mountain, Yunnan. **13.** Songzanlin Monastery in Shangri-La County, Yunnan, 31 July 2025. **14.** Visiting Dali University, College of Pharmacy, Dali, Yunnan, 4 August 2025. **15.** Local cuisine with different kinds of insects in Kunming, Yunnan, 6 August 2025.



**Figures 16–21.** Habitats in Yunnan (photos by Chuntian ZHANG). **16.** Haba Snow Mountain, 30 July 2025. **17.** Pudacuo, Shangri-La City, 31 July 2025. **18.** Shangri-La, 1 August 2025. **19.** Baima Snow Mountain, dry and hot valley, 3 August 2025. **20.** Mt. Niaodiao, 4 August 2025. **21.** Mt. Taibao, 6 August 2025.



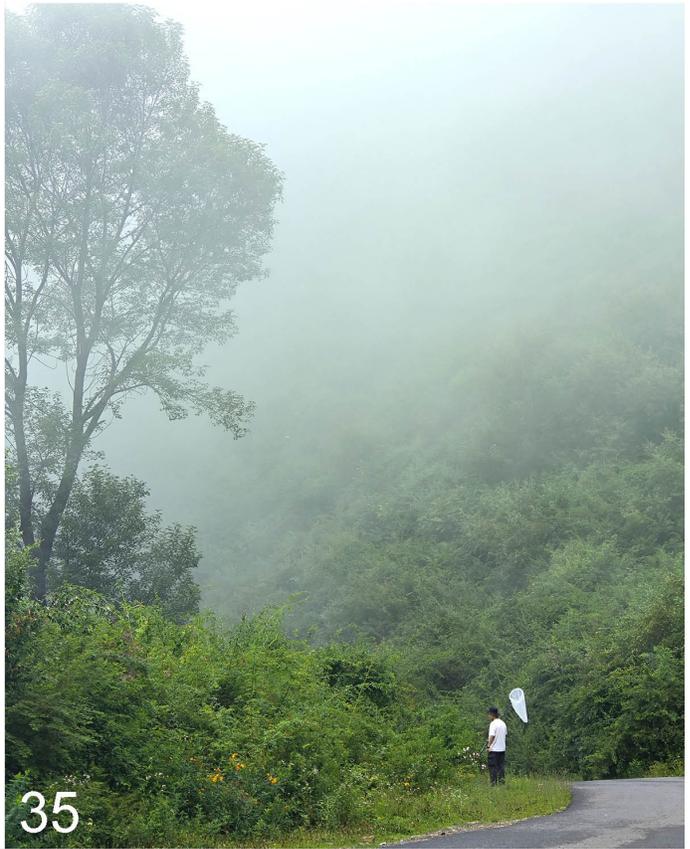
**Figures 22–27.** 22. Additional photos. Monkey carrying a baby monkey, Lushan, Xichang City, Sichuan, 21 July 2025. 23. The Great Muli Monastery and the collection locality, Sichuan, 25 July 2025. 24. Baishuitai Travertine Terraces, Xianggellia (Shangri-la), in the way to Haba Snow Mountains, Yunnan, 30 July 2025. 25. The First Bend of the Yangtze River (Moon Bend) in Benzilan town, Yunnan. 26. Meili Snow Mountains in Dêqên County, Yunnan. 27. Mingyong Glacier, Yunnan, 2 August 2025.



**Figures 28–33.** Photos taken by Yang TANG of Group B in Sichuan. **28.** Collecting in foggy Luding, 10 August 2025. **29.** Flowers, probably *Leucanthemum maximum*, in Wangmucun, Kangding City, 11 August 2025. **30.** Junjian LI and Xingyan ZHANG collecting, Sac. Mt. Jiangbu, Kangding City. **31.** Xingyan ZHANG walked too fast and needed to rest halfway up the mountain, Liqicun, Kangding City, 3500 m. **32.** This mating pair of tachinids are possibly *Sumpigaster subcompressa* (Walker) based on the yellow pruinosity on male scutum, 17 August 2025. **33.** Searching for tachinid flies by the stream, 20 August 2025.



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**Figures 34–37.** Members of group B collecting in foggy Luding, Sichuan (photos by Xingyan ZHANG). **34.** The Mitsubishi van we rented. **35.** Yang TANG collecting by the road. **36.** Junjian LI leading us further in search of habitats for tachinids. **37.** Xingyan ZHANG taking a selfie with a cow.



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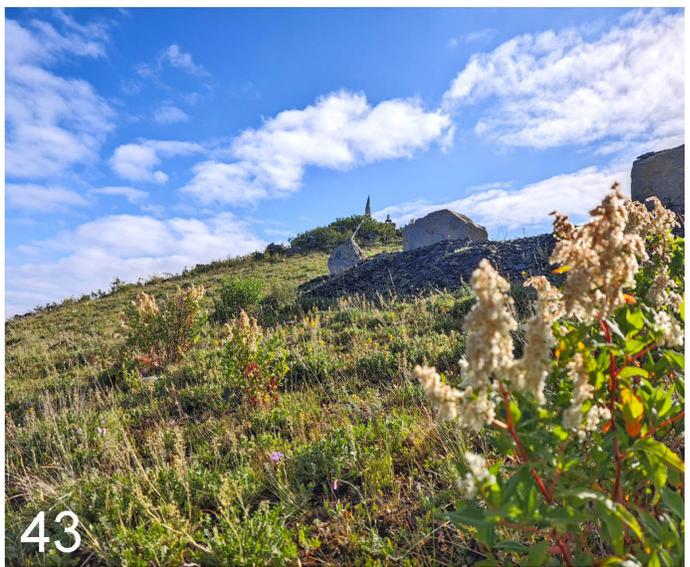
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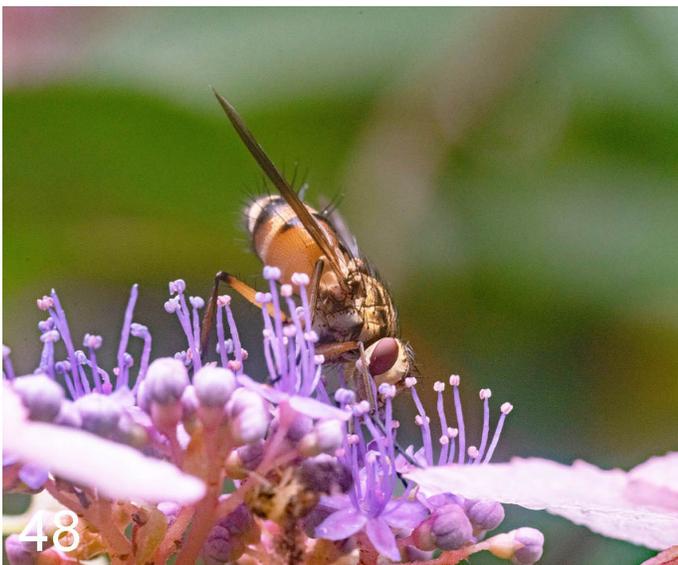


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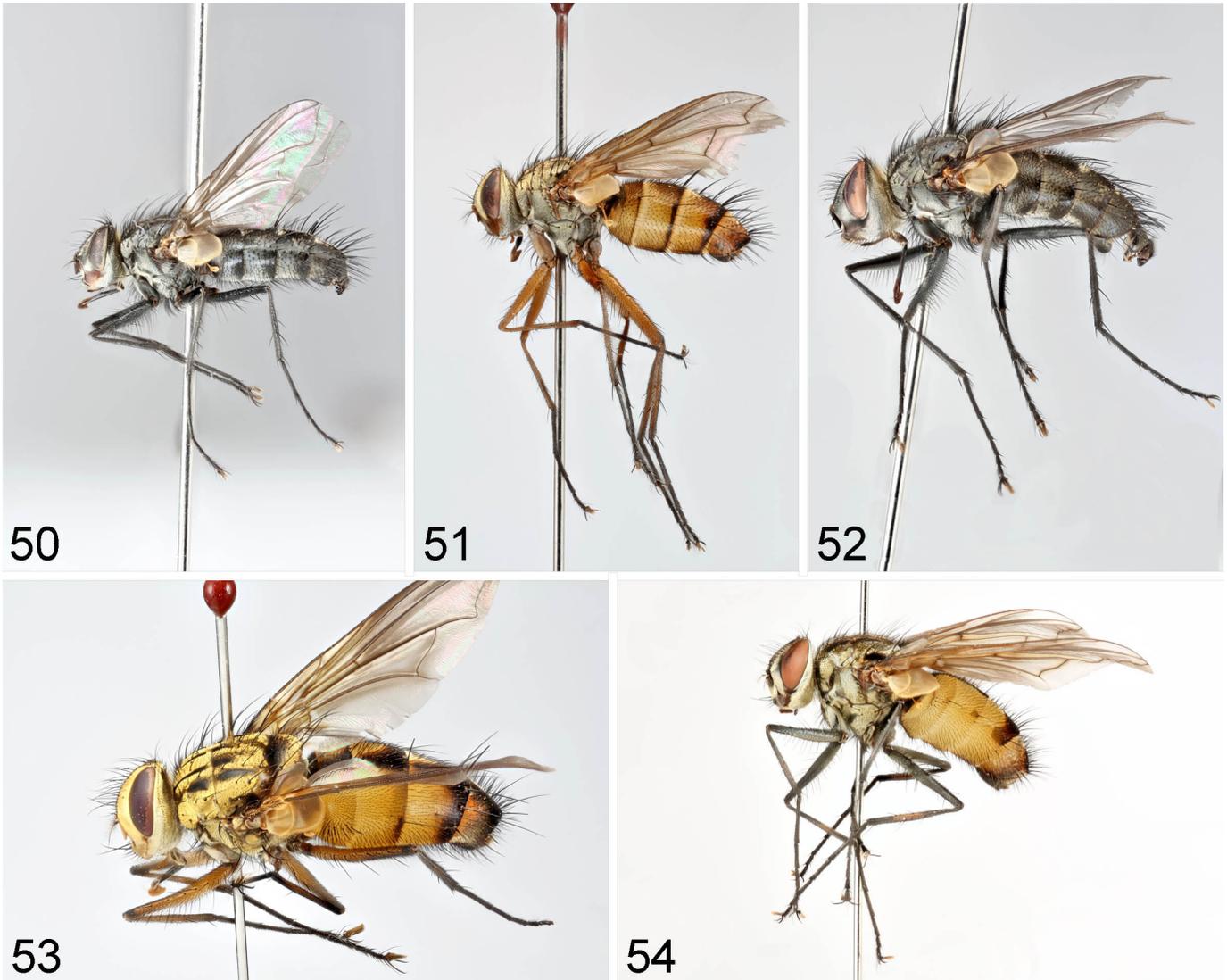
**Figures 38–43.** Habitats in Kangding, Sichuan (photos by Xingyan ZHANG). **38.** The stone has written on it ‘alpine garden of China’. The hill is full of different kinds of flowers, and *Dexia alticola* Zhang & Shima was so abundant that even random sweeps could easily catch them. **39.** The hill in the foreground was full of flowers and the other side by the house was not. **40.** The flowering plants are probably *Anemone vitifolia* Buch.-Ham. ex DC.; the fence to the left was covered with black plastic and attracted lots of Exoristinae. We assume that the tachinids were gathered there for the warmth of the black plastic. **41.** First day of sunshine, 12 August 2025. A village in Xiabaxiang, Kangding. **42.** Top of the Sacred Mount Jiangbu. A lot of flowers nearby attracted many tachinids. **43.** Closer look at the grassland showing all the flowers.



**Figures 44–49.** Pictures of tachinid flies taken during the trip by Xingyan ZHANG. **44.** *Estheria hirtinerva* Zhang & Shima, a very common species in Xiabaxiang, Kangding, 12 August 2025. **45.** *Peteina hyperdiscalis* Aldrich, Xiabaxiang, Kangding, 12 August 2025. **46.** *Cylindromyia* (*Cylindromyia*) *brassicaria* (Fabricius), Mt. Gongga, Kangding, 14 August 2025. **47.** *Dinera angustifrons* Zhang & Shima, Lietahu, Jiulong County, 4115 m, 16 August 2025. The yellow flower is one of the few that blooms at that time and at that high elevation; it attracts some bumble bees and tachinid flies. The other place where tachinid flies could be found at that elevation is a kind of Fagaceae tree which is about 2–3 m high and a lot of small insects were hidden under the broad leaves. **48.** *Dexia tenuiforceps* Zhang & Shima, in a pink flower, Longcanggou, Yingjing County, 20 August 2025. **49.** *Panzeria anthophila* (Robineau-Desvoidy) in Geridi Village, Jiagenba, Kangding, 13 August 2025.

## RESULTS

During the summer collections of 2025, ca. 2100 specimens belonging to 187 species were collected. Of these, 49 species are recorded for the first time from Yunnan or Sichuan province. In this section, we provide some pictures of some interesting species that we collected in the Hengduan Mountains, and list the tachinid species that are newly recorded (nr) at the province level.



**Figures 50–54.** Images of some Dexiini species. **50.** *Dinera fuscata fuscata* Zhang & Shima, ♂, B3. **51.** *Dexia alticola* Zhang & Shima, ♂, B6. **52.** *Dinera angustifrons* Zhang & Shima, ♂, B7. **53.** *Dexia tenuiforceps* Zhang & Shima, ♂, B35. **54.** *Dexia chaoi* Zhang & Shima, 1♂, A31.

## Tachinid species newly recorded (nr) at the province level

### DEXIINAE, Dexiini

1. *Dinera chaoi* Zhang & Shima, 2006 nrSC 1♂, A31.

Distr.: China (Sichuan, Yunnan, Qinghai & Xizang).

### Dufouriini

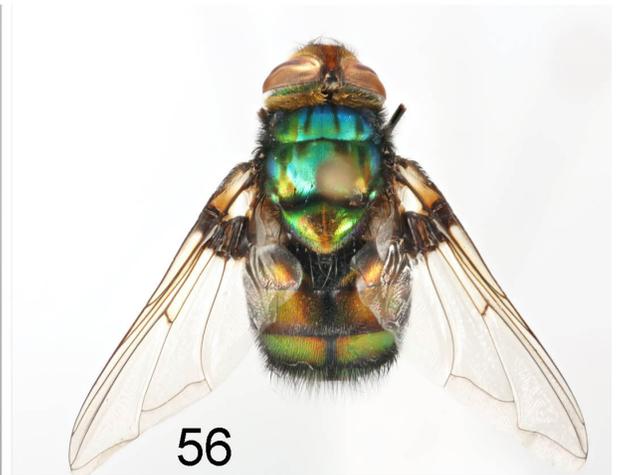
2. *Chetoptilia puella* (Rondani, 1862) nrSC 1♂, A16. (First record from China in Li et al., 2024: 110.)

Distr.: China (Sichuan, Nei Mongol); Russia, Georgia, Europe.

### Rutiliini

3. *Rutilia rubriceps* Macquart, 1847 1♂, A24. (First record from China in Li et al. 2024: 112.)

Distr.: China (Sichuan, Shanxi, Guangxi); India, Sri Lanka, Australia, Indonesia.



Figures 55–58. Images of *Rutilia rubriceps* Macquart. 55, 56. ♂, A24. 57, 58. ♀ Dengchigou, 1539 m, Baoxing County, Sichuan, 18 July 2017, Houcan LIANG. 55, 57 in lateral view; 56, 58 in dorsal view.

## Voriini

4. *Athrycia curvinervis* (Zetterstedt, 1844) nrYN 2♀, B4; 1♀, B22; 1♀, B23; 1♀, A31.

Distr.: China (Yunnan, Sichuan, Jilin, Liaoning, Nei Mongol, Shanxi, Ningxia, Gansu, Qinghai, Xizang, Xinjiang); Russia, Japan, Europe.

5. *Athrycia impressa* (van der Wulp, 1869) nrYN 1♀, A31.

Distr.: China (Yunnan, Sichuan, Heilongjiang, Jilin, Liaoning, Nei Mongol, Beijing, Gansu, Qinghai, Xinjiang); Mongolia, Russia, Central Asia, Europe.

6. *Dexiomimops flavipes* Shima, 1987 nrSC 2♀2♂, B25; 1♀, B30; 1♀, B35.

Distr.: China (Sichuan, Liaoning, Hebei, Shanxi, Shaanxi, Taiwan).

7. *Dexiomimops rufipes* Baranov, 1935 nrSC/YN 3♂, A6; 3♀16♂, A16; 1♀18♂, A14; 1♂, A34; 1♀, A22.

Distr.: China (Yunnan, Sichuan, Heilongjiang, Jilin, Hebei, Zhejiang, Taiwan, Guangdong, Guangxi); Russia, Japan.

8. *Eriothrix micronyx* Stein, 1924 nrSC 5♂1♀, B10; 1♂, B23; 2♂1♀, B11; 1♀, B21; 1♀, B26; 1♀, B12.

Distr.: China (Sichuan, Yunnan, Xinjiang); Russia, Europe.

## EXORISTINAE, Blondeliini

9. *Admontia grandicornis* (Zetterstedt, 1849) nrSC 1♂, B22; 1♂, B16; 2♂, B20; 1♂, B11.

Distr.: China (Sichuan, Yunnan, Jilin, Ningxia, Qinghai); Russia, Europe.

10. *Admontia* sp. 1♂, B20.



Figures 59-60. Images of *Admontia* sp., ♂, B20. 59. Lateral view. 60. Dorsal view.

**11. *Biomeigenia flava* Chao, 1964 nrSC 1♀, A13.**

**Distr.:** China (Sichuan, Yunnan, Liaoning, Shanxi, Ningxia, Zhejiang).

**12. *Blondelia siamensis* (Baranov, 1938) nrSC 1♂, A7; 9♂, A31; 7♂, A13.**

**Distr.:** China (Sichuan, Yunnan, Jilin, Liaoning, Nei Mongol, Shanxi, Ningxia, Hunan, Fujian); Russia, Japan, Thailand.

**13. *Eophyllophila includens* (Walker, 1859) nrSC/YN 2♂, A33; 2♂, A9; 1♂, A30; 1♂, B1.**

**Distr.:** China (Sichuan, Yunnan, Shanxi, Shaanxi, Anhui, Taiwan, Guangdong); India, Indonesia.

**14. *Lixophaga fallax* Mesnil, 1963 nrYN 1♂, A33.**

**Distr.:** China (Sichuan, Yunnan, Jilin, Liaoning, Nei Mongol, Beijing, Shanxi, Henan, Hunan, Guangdong, Guangxi); Japan.

**15. *Uromedina atrata* (Townsend, 1927) nrYN 5♂, A34; 1♂, A36; 1♂, A38.**

**Distr.:** China (Yunnan, Taiwan, Guangdong, Hainan); Russia, Japan, Myanmar, Thailand, Malaysia, Papua New Guinea.

### Eryciini

**16. *Carcelia (Carcelia) caudata* Baranov, 1931 nrSC 1♂, A14; 1♀, A17.**

**Distr.:** China (Sichuan, Yunnan, Liaoning, Beijing, Shandong, Shaanxi, Anhui, Jiangsu, Shanghai, Zhejiang, Jiangxi, Hunan, Guizhou, Fujian, Taiwan, Guangdong, Guangxi, Hainan); Japan, India, Sri Lanka, Malaysia, Indonesia.

**17. *Carcelia (Carcelia) illiberisi* Chao & Liang, 2002 nrSC, YN 8♂, A34; 1♂, A16; 1♂, B25; 1♂, B29; 1♂, A23; 1♂, A31; 1♂, A26; 1♂, A33; 1♂, A6; 4♂, B26.**

**Distr.:** China (Sichuan, Yunnan, Shanxi).

**18. *Carcelia (Euryclea) hemimacarttioides* (Baranov, 1934) nrYN 3♂3♀, A31; 1♂, A34; 1♀, A27.**

**Distr.:** China (Sichuan, Yunnan, Beijing, Shanghai, Taiwan); Japan.

**19. *Drino (Palexorista) inconspicuoidea* (Baranov, 1932) nrSC 1♂, A34; 1♀, A13.**

**Distr.:** China (Sichuan, Yunnan, Heilongjiang, Liaoning, Zhejiang, Hunan, Xizang, Taiwan, Guangdong, Hainan); Japan, Melanesia.

**20. *Erycia fasciata* Villeneuve, 1924 nrSC 1♀, B13.**

**Distr.:** China (Sichuan, Liaoning, Nei Mongol); Russia, Europe.

**21. *Nilea hortulana* (Meigen, 1824) nrSC 1♂, A3; 1♂, B9.**

**Distr.:** China (Sichuan, Liaoning, Nei Mongol, Hebei, Shanxi, Shaanxi, Ningxia, Zhejiang, Hainan); Japan, Melanesia, Transcaucasia, Europe.

**22. *Nilea innoxia* Robineau-Desvoidy, 1863 nrSC 1♂, B12.**

**Distr.:** China (Sichuan, Liaoning); Russia, Japan, Europe.

**23. *Nilea rufiscutellaris* (Zetterstedt, 1859) nrSC 1♀, B10.**

**Distr.:** China (Sichuan, Liaoning); Russia, Japan, Europe.

**24. *Phebellia carceliaeformis* (Villeneuve, 1937) nrYN 1♀, A34.**

**Distr.:** China (Sichuan, Yunnan, Hebei).

**25. *Phebellia glauca* (Meigen, 1824) nrSC/YN 1♂, A30; 1♂, A5.**

**Distr.:** China (Sichuan, Yunnan, Heilongjiang, Jilin, Liaoning, Nei Mongol, Ningxia); Russia, Mongolia, Japan, Transcaucasia, Europe.

**26. *Phebellia stulta* (Zetterstedt, 1844) nrYN 1♂, A34.**

**Distr.:** China (Yunnan, Jilin, Liaoning, Nei Mongol, Ningxia); Russia, Japan, Europe.

**27. *Phryxe nemea* (Meigen, 1824) nrYN 1♂, A34; 1♂, B9.**

**Distr.:** China (Sichuan, Yunnan, Liaoning, Nei Mongol, Hebei, Ningxia, Qinghai, Xinjiang); Russia, Japan, Transcaucasia, Europe.

**28. *Phryxe vulgaris* (Fallén, 1810) nrSC 1♂, A31; 3♂1♀, B4; 1♂, A34; 2♀, B9; 1♀, B13; 1♀, B23.**

**Distr.:** China (Sichuan, Yunnan, Heilongjiang, Jilin, Liaoning, Nei Mongol, Hebei, Tianjin, Beijing, Shanxi, Henan, Shaanxi, Ningxia, Qinghai, Xinjiang, Shanghai, Hubei, Chongqing, Xizang, Guangdong); Russia, Mongolia, Japan, Transcaucasia, Middle East, Central Asia, Europe, Canada, USA.

**29. *Pseudoperichaeta palesioidea* (Robineau-Desvoidy, 1830) nrSC 1♂, B15; 1♂, B9.**

**Distr.:** China (Sichuan, Jilin, Nei Mongol); Russia, Mongolia, Transcaucasia, Middle East, Central Asia, Europe.

**30. *Senometopia fujianensis* (Chao & Liang, 2002) nrSC 1♂, B1.**

**Distr.:** China (Sichuan, Zhejiang, Fujian).

**31. *Senometopia parviseta* Shima & Tachi, 2022 nrSC 1♂1♀, A4.**

**Distr.:** China (Sichuan, Yunnan); Japan.

**32. *Senometopia quadrata* Shima & Tachi, 2022 nrSC 1♂2♀, A5.**

**Distr.:** China (Sichuan, Yunnan); Nepal.

**33. *Senometopia rufa* (Baranov, 1931) nrSC 1♂, A34; 1♂, A14.**

**Distr.:** China (Sichuan, Yunnan, Shanxi, Taiwan); Japan.

### Exoristini

**34. *Exorista (Spixomyia) fortis* Chao, 1964 nrYN 1♀, A24.**

**Distr.:** China (Yunnan, Liaoning, Anhui, Zhejiang, Guangdong).

### Goniini

**35. *Eumea linearicornis* (Zetterstedt, 1844) nrSC 1♂, A34; 2♂, A9; 1♂, A33.**

**Distr.:** China (Sichuan, Yunnan, Heilongjiang, Liaoning, Nei Mongol, Hebei, Beijing, Shanxi, Ningxia); Russia, Japan, Transcaucasia, Europe.

**36. *Frontina tricolor* Shima, 1988 nrSC 1♀, B3.**

**Distr.:** China (Sichuan, Liaoning); South Korea, Japan.

**37. *Gonia olgae* (Rohdendorf, 1927) nrSC 1♂, B4.**

**Distr.:** China (Sichuan, Central, East, Nei Mongol, Northeast), Japan, South Korea, Middle East, Europe.

**38. *Myxexoristops hertingi* Mesnil, 1955 nrSC 1♂, B2; 1♂, B7.**

**Distr.:** China (Sichuan, Ningxia); Russia, Europe.

**39. *Pales carbonata* Mesnil, 1970 nrYN 4♂, A33; 4♂, A34.**

**Distr.:** China (Sichuan, Yunnan, Liaoning, Beijing, Shandong, Shanxi, Ningxia, Gansu, Qinghai, Xinjiang, Anhui, Jiangsu, Shanghai, Zhejiang, Jiangxi, Xizang, Fujian, Taiwan, Guangdong, Hainan); Japan.



Figures 61, 62. Images of species primarily distributed in China. 61. *Pales carbonata* Mesnil ♂, A33. 62. *Nemoreaea fasciata* (Chao & Shi), ♂, A34.

#### Winthemiini

40. *Winthemia cruentata* (Rondani, 1859) nrYN 7♂, A34; 5♂, A30; 1♂1♀, B13; 2♀, B17; 1♂, B14; 1♂, B26.

**Distr.:** China (Sichuan, Yunnan, Heilongjiang, Jilin, Liaoning, Nei Mongol, Beijing, Shanxi); Russia, Mongolia, South Korea, Japan, Transcaucasia, Europe.

41. *Winthemia venustoides* (Mesnil, 1967) nrYN 1♂, A35.

**Distr.:** China (Yunnan, Liaoning, Beijing, Shanxi); Japan.

#### PHASIINAE, Gymnosomatini

42. *Ectophasia crassipennis* (Fabricius, 1794) nrSC 1♀, B23.

**Distr.:** China (Sichuan, Yunnan, Heilongjiang, Liaoning, Nei Mongol, Shanxi, Shaanxi, Hubei, Xizang); Russia, North Korea, South Korea, Japan, Transcaucasia, Europe.

#### Leucostomatini

43. *Calyptromyia* sp. nrSC/YN 1♀, B24; 3♀, A30.

**Distr.:** China (Sichuan, Yunnan, Heilongjiang, Liaoning, Shanxi, Anhui, Zhejiang, Xizang, Fujian, Taiwan, Guangxi, Hainan); Russia, North Korea, South Korea, Japan, Vietnam.

#### Strongygastrini

44. *Melastrongygaster chaoi* Shima, 2015 nrYN 1♂, A35.

**Distr.:** China (Sichuan, Yunnan, Liaoning, Hebei).



Figures 63, 64. *Calyptromyia* sp., ♀, A31. 63. Lateral view. 64. Close-up view of female terminalia.

### TACHININAE, Leskiini

45. *Fischeria bicolor* Robineau-Desvoidy, 1830 nrSC 1♀, B35.

Distr.: China (Sichuan, Gansu); Indonesia, Transcaucasia, Middle East, Central Asia, Europe.

#### Macquartiini

46. *Dicarca fluviatilis* Richter, 1993 nrSC 1♂, B4; 1♀, B13.

Distr.: China (Sichuan, Liaoning); Russia.

#### Megaprosopini

47. *Dexiosoma caninum* (Fabricius, 1781) nrSC 3♂, B3; 1♂, B19.

Distr.: China (Sichuan, Jilin, Liaoning, Ningxia); Russia, Japan, Europe.

#### Polideini

48. *Lydina aenea* (Meigen, 1824) nrSC 1♂2♀, B14; 1♂1♀, B15; 1♂3♀, B10; 1♀, B17.

Distr.: China (Sichuan, Nei Mongol); Russia, Transcaucasia, Europe.

#### Tachinini

49. *Tachina (Tachina) magnicornis* (Zetterstedt, 1844) nrSC 1♀, B10.

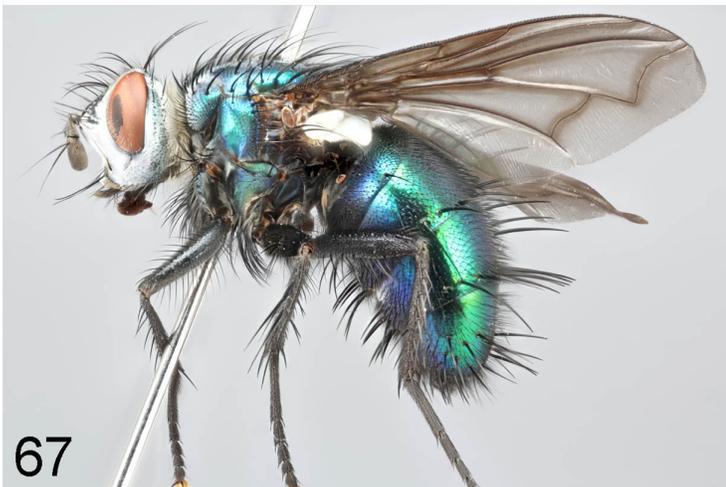
Distr.: China (Sichuan, Heilongjiang, Jilin, Liaoning, Nei Mongol, Hebei, Beijing, Shanxi, Ningxia, Xinjiang); Russia, Mongolia, North Korea, South Korea, Japan, Central Asia, Middle East, Europe.



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**Figures 65–68.** Tachinids with metallic luster. **65.** *Chrysosomopsis stricta* (Aldrich), ♂, B7. **66.** *Chrysomikia viridicapitis* Chao & Zhou, ♀, Wanglang Nature preserve, Pingwu County, Sichuan, Houcan (coll. LIANG, 20.VII.2016). **67.** *Janthinomyia felderi* (Brauer & Bergenstamm), ♀, B26. **68.** *Chrysomikia grahami* (Villeneuve), ♀, B31.

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