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<https://doi.org/10.5109/2592>

出版情報 : ESAKIA. 35, pp.223-225, 1995-01-31. Entomological Laboratory, Faculty of
Agriculture, Kyushu University

バージョン :

権利関係 :



Some Notes on the Genus *Osmia* of Eastern Asia with a New Synonym (Hymenoptera, Megachilidae)^{1),2)}

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Abstract. *Osmia* (*Chalcosmia*) *imaii* Hirashima is newly synonymized with *Osmia* (*Chalcosmia*) *jacoti* Cockerell described from China. Three species of the genus *Osmia* are recorded from Korea.

1. On *Osmia* (*Chalcosmia*) *imaii*

Osmia (*Chalcosmia*) *imaii* was described by Hirashima in 1973 based on specimens discovered in Hyogo Pref., southern Japan. He wrote some Chinese specimens collected in Beijing might be conspecific with *imaii* and it might be a recent immigrant to Japan from China by trade of timbers. After that, the species has been introduced from Hyogo Pref. to Fukuoka City for the study of biology and also has been collected from some other places in Kyoto, Fukui, Shimane and Saitama Prefs. In the present study we examined the type specimen of *Osmia* (*Chalcosmia*) *jacoti* deposited in the National Museum of Natural History, Smithsonian Institution, Washington, and many specimens named as *jacoti* collected in China preserved in the Institute of Zoology, Academia Sinica, Beijing. We recognize *Osmia* (*Chalcosmia*) *imaii* Hirashima is synonymous with *O. (C.) jacoti* Cockerell.

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- 1) Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka 812 (Ser. 4, No. 88).
 - 2) Partial result from the Korea-Japan Co-operative Science Program on "The Evolution and Biogeography of the Insects in the East Asia". No. 24.

***Osmia (Chalcosmia) jacoti* Cockerell**

Osmia (Chalcosmia) jacoti Cockerell, 1929, Entomologist, 62: 205 [female, China: Tsinan]; Xu *et al.*, 1994, J. Fruit Sci., 11: 153.

Osmiu (Chalcosmia) imuii Hirashima, 1973, J. Fac. Agr., Kyushu Univ., 18: 64 [female & male, Japan: Hyogo and Fukuoka Prefs., China: Beijing]; Kakutani, 1986, in Bachelor thesis to Fac. Agr., Kyoto Univ.; Haneda, 1987, Hym. Comm., Fukui, (27): 1-2; Maeta & Sugiura, 1988, Sukashiba, Matsue, 30: 4; Kusumoto, Pulex, Fukuoka, (76): 372. **new synonym.**

Specimens examined: [China]: type female of *jacoti*, Tsinan, China, 7. iv. 1928 (A. Jacot). Beijing: 3 females, 24. iv. 1962 (Mao Tinglong); 1 male, 1. iv. 1963 (Wu Yanru); 3 males, 13. iv. 1963 (Chen Tailu); 2 males, 18. iv. 1963 (Ge Shumei); 11 females, 6. v. 1963 (Chen Tailu); 1 female, 15. v. 1964 (Ge Shumei); 3 females, 27. iv. 1973 (Wu Yanru). Hebei Prov.: 9 females, Changli, 28. iv. 1962 (Chen Tailu). Tiangsu Prov.: 2 females, Nanjing, 25. iv. 1935 (O. Piel). Inner Mongolia: 1 female, Qinshuibei, 18. v. 1989 (Xu Huanli). Shandong Prov.: 1 female and 1 male, Weihai, 20. iv. 1993 (Xu Huanli). [Japan]: holotype female of *imuii*, 10 paratopotype females and 10 paratopotype males of *imuii*, reared from trap nests, Himeji, Hyogo Pref., iii. 1973 (K. Imai).

Distribution: China (Beijing, Hebei, Tiangsu, Shandong, Provs., Inner Mongolia) and Japan (Honshu: Saitama, Kyoto, Hyogo, Shimane Prefs., Kyushu: Fukuoka Pref.).

2. Records of Korean species of the genus *Osmia*

Four species of the genus *Osmiu* were recorded from Korea (Kim, 1970), *i.e.* *Osmiu (Osmiu) excavata* Alfken, 0. (0.) *pedicornis* Cockerell, 0. (0.) *cornifrons* Radoszkowski, and 0. (*Cryptosmiu*) *sutoi* Yasumatsu et Hirashima. One of the authors, Tadauchi, collected 3 species in Korea during the Korea-Japan Co-operative Science Program in 1991 and 1992, one of which will be described in a separate paper.

1. *Osmia (Osmia) cornifrons* (Radoszkowski)

Specimens examined: [Korea]: Cheon-La Nam Do: 2 males, Sim Won Valley, Nan Nae Meon, Nam Weon Gun, 13. v. 1991 (O. Tadauchi). Cheon-La Buk Do: San Lyong Li, San Nae Meon, Nam Weon Gun: 1 male, 15. v. 1991 (Malaise trap); 1 female, 29. iv. 1992 (O. Tadauchi, *Syringareticulata*); 1 female, 2. v. 1992 (O. Tadauchi); 1 male, 2. v. 1992 (O. Tadauchi, *Weigela florida*). Kyon Sang Nam Do: 1 female, Sam Jeon Li, Ma Cheong Myon, Hamyang Gun, 1. v. 1992 (O. Tadauchi, *Potentilla frugurioides* var. *sprengeliana*). Kyonggi Do: 1 female, Kang Nung, Pochon Gun, 19. v. 1992 (O. Tadauchi, *Lonicera muuckii*). Kang Weon Do: Gam Jong Li, Dong Myon, Chun Chon Gun: 1 male, 25. iv. 1992 (O. Tadauchi, *Brassic napus*); 2 females, 21. v. 1992 (O. Tadauchi, *L. muuckii*, *Chelidonium majus*); 1 male, Boug Myong Li, Dong Sam Myon, Chun Chon Gun, 26. iv. 1992 (T. Saigusa).

Distribution: Ussuri, Korea, Japan.

2. *Osmia (Osmia) pedicornis* Cockerell

Specimens examined: [Korea]: Cheon La Nam Do: Sim Won Valley, Nan Nae Meon, Nam Weon Gun: 1 male, 13. v. 1991 (O. Tadauchi); 1 male, 29. iv. 1992 (O. Tadauchi, *Spirueu*

prunifolia var. *simpliciflora*). Cheon-La Buk Do: 1 male, San Lyong Li, San Nae Meon, Nam Weon Gun, 2. v. 1992 (O. Tadauchi, *W. florida*). Kyonggi Do: Kang Nung, Pochon Gun: 1 male, 23. iv. 1992 (O. Tadauchi, *Rubus pungens* var. *oldhami*); 1 female, 19. v. 1992 (O. Tadauchi, *Elaeagnus multiflora*). Kang Weon Do: Boug Myong Li, Dong Sam Myon, Chun Chon Gun: 1 male, 26. iv. 1992 (O. Tadauchi, *Taraxacum* sp.); 1 male, 26. v. 1992 (T. Saigusa); 1 female & 1 male, Pupan Myon, Hong Cheon Gun, 20. v. 1992 (O. Tadauchi, *Potentilla freyniana*).

Distribution: China, Korea, Japan.

3. *Osmia* (*Chalcosmia*) **sp. 1**

Specimen examined: [Korea]: Kyonggi Do: 1 female, Kang Nung, Pochon Gun, 23. iv. 1992 (O. Tadauchi, *Rubus pungens* var. *oldhami*).

Acknowledgments

We express our hearty thanks to Prof. Emeritus Y. Hirashima of Kyushu Univ. for his kind help for the study, to Dr. R. J. McGinley of National Museum of Natural History, Smithsonian Institution, Washington, for lending the type specimen of *Osmia jacoti*. We are indebted to Prof. K. Morimoto and Prof. T. Saigusa of Kyushu Univ. for their various help in the Korea-Japan Co-operative Science Program.

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