Ricker P. L. 1946. New and noteworthy Asiatic species of Lespedeza. Am. J. Bot. 33: 256–258.

Ricker はアジアから多数のハギ属の新種を 記載したが、そのほとんどが1点だけの押し 葉標本(多くはA, GH あるいはNY) をタイ プとして記載されたものであった. さらに形 態変異の多い形質を新種の判別形質としてと りあげたことが多かった. このためその後の 研究では彼の種は多くが不明種として扱われ ている. ここでは日本産標本から記載された Lespedeza anthobotrya Ricker とハリウッド産で 中国か朝鮮原産とされる標本で記載された L. bracteolata Ricker について検討した結果をまと めた. Lespedeza anthobotrya は岐阜県 Toki-gun, Kasahara-machi (土岐郡笠原町)の原産で、す でに Hatusima (1967) がマルバハギではないか と疑問符付きでその異名とし、さらに Akiyama (1988) が、原記載に基づき異名としたものであ

る. このホロタイプ (Fig. 1) を調べて、それらの同定に間違いのないことを確認した。また、L bracteolata はハリウッドで採集された標本 1 点に基づいて記載された種であり。その正体は不明であった。このホロタイプ (Fig. 2) を調べた結果これはキハギと同種であることが明らかになった。

(aBotanical Gardens, Tohoku University, Sendai, 980-0862 JAPAN;

E-mail: ohashi@mail.tsins.tohoku.ac.jp ^a 東北大学植物園津田記念館,

^bDepartment of Basic Sciences, Faculty of Science and Engineering,

Ishinomaki Senshu University, Ishinomaki, Miyagi, 986-8580 JAPAN;

^b 石巻専修大学理工学部基礎理学科, ^cSchool of Pharmacy, Iwate Medical University,

Yahaba, Iwate, 028-3694 JAPAN ° 岩手医科大学薬学部)

J. Jpn. Bot. 84: 188-191 (2009)

Noriyuki TANAKA: **Taxonomic Treatments for Two Taxa of** *Ypsilandra* (*Melanthiaceae*) from the Sino-Vietnamese Border

中国・ベトナム国境地帯に分布するショウジョウバカマ類(シュロソウ科)についての 分類学的新見解(田中教之)

Summary: *Ypsilandra jinpingensis* W. H. Chen, Y. M. Shui & Z. Y. Yu described from southeast Yunnan, China, is transferred to the genus *Helonias* as *H. jinpingensis* (W. H. Chen, Y. M. Shui & Z. Y. Yu) N. Tanaka. *Ypsilandra yunnanensis* W. W. Sm. & Jeffrey var. *fansipanensis* J. M. H. Shaw reported from northern Vietnam is reduced to *H. jinpingensis*. It is noteworthy that *H. jinpingensis* is close in some floral characters to *H. bullata*, which is the only North American congener. Grounds for the reduction of both *Ypsilandra* Franch. and its closely allied *Heloniopsis* A. Gray to *Helonias* L. are briefly mentioned.

Chen et al. (2003) described a new

species, *Ypsilandra jinpingensis* W. H. Chen, Y. M. Shui & Z. Y. Yu, based on a specimen collected at an altitude of 2660 m in Jinping, southeast Yunnan, China. Line drawings of the habit and some floral parts of the plant were presented in their paper. Shui and Chen (2006) also gave a brief account of this plant with a color photograph of the habit taken in the natural habitat.

Shaw (2008) reported a new variety, *Ypsilandra yunnanensis* W. W. Sm. & Jeffrey var. *fansipanensis* J. M. H. Shaw, based on the collection made at an altitude of 2700 m in Lào Cai province, northern

Vietnam, which is close to the border with China and to Jinping. Two color photographs of the inflorescence and the habit of this plant were provided in his paper.

The two taxa reported in their papers are very similar in many respects. For instance, they share a short style (1.3-1.8 mm long), a deeply 3-lobed stigma (lobes 0.8–1 mm long), stamens (4.6–5 mm long, the filaments sometimes to 10 mm long in the Vietnamese variety) equaling or exceeding the tepals (4.5–5 mm long), long pedicels (5.5–12 mm long), and the same flowering season (September to October). The tepals of Ypsilandra yunnanensis var. fansipanensis are white at anthesis. In contrast, those of Y. jinpingensis are reported to be yellowish green. However, it is evident from the drawings and the photograph that the flowers of Y. jinpingensis have already passed their peak, as the inflorescence is elongate, the pedicels are ascending, and the ovaries look like young fruits. As noted by Shaw (2008), the color of the tepals of this plant group appears to gradually turn green with age. Judging from their close similarities in morphology and flowering season and their geographically close habitats similar in altitude (2660–2700 m), the two taxa appear to be of the same entity. In Shaw's paper no reference was made to Y. jinpingensis in connection with his new variety.

Ypsilandra Franch. is closely related to Heloniopsis A. Gray and Helonias L. (Kawano and Masuda 1980, Tanaka 1998). Both Ypsilandra and Heloniopsis are indigenous to eastern Asia, while Helonias is disjunctively distributed in eastern North America (Tanaka 1997d). It is certain that the three genera differ to some extent from one another. For instance, in Helonias the seeds are broader and the ovules produced

in an ovary locule are fewer than those of the two other genera (Tanaka 1997b). In Helonias and Ypsilandra, the anthers are unilocular and the inner staminal filaments are inserted at the base of the ovary (Tanaka 1997a), whereas in *Heloniopsis* the anthers are bilocular or virtually bilocular with traces of an apical confluence and the filaments are free from the ovary base (Tanaka 1997b). Nevertheless, all these differences do not appear to be so great as to deserve a generic demarcation. Further, the three genera are quite similar in habit, sharing many basic characters, such as cylindric perennial rhizomes, oblanceolate apiculate evergreen rosulate leaves, scapes with a terminal compact inflorescence, ebracteate (sometimes bracteate) pedicellate nectariferous actinomorphic bisexual flowers, and loculicidally dehiscent capsules containing seeds with an elongate testa (cf. Tanaka 1998). Based mainly on these observations, Tanaka (1998) treated the three genera as congeneric, reducing Ypsilandra and Heloniopsis to Helonias. This treatment is followed up here with the further transfer of Y. jinpingensis, including Y. yunnanensis var. fansipanensis, to Helonias as H. jinpingensis (W. H. Chen, Y. M. Shui & Z. Y. Yu) N. Tanaka.

Helonias jinpingensis appears distinct from all the other allied species. It differs from *H. yunnanensis* (W. W. Sm. & Jeffrey) N. Tanaka by its longer stamens far exceeding the pistil, longer pedicels (2–3 mm long in *H. yunnanensis*) and later flowering season (June to August in *H. yunnanensis*), and from *H. alpina* (F. T. Wang & Ts. Tang) N. Tanaka by its shorter style (2.5–6 mm long in *H. alpina*) and shorter tepals (7–12 mm long in *H. alpina*) (data partially from Chen 1980).

Helonias jinpingensis has a short style with a deeply 3-lobed stigma, and stamens

far exceeding the pistil, as stated above. It is noteworthy that *H. jinpingensis* is similar in these floral characters to *H. bullata*, which is the only North American congener, although the style of the latter is even shorter (for *H. bullata* see Tanaka 1997a, 1997b, 1997d, 1998). The presence of these characters in *H. jinpingensis* appears to narrow the morphological gap between the Asian congeners and *H. bullata*. In this respect, *H. jinpingensis* is of particular interest in tracing the evolutionary relationship between the two geographically isolated species groups and in reviewing the taxonomy of this genus.

It is also notable that *Helonias jinpingensis* has floral bracts each subtending a pedicel, as they are normally lacking in the other species of this genus, except *H. kawanoi* (Koidz.) N. Tanaka (Tanaka 1997c, 1997d, 1998) which is known from the Nansei Islands in southwest Japan.

Helonias jinpingensis (W. H. Chen, Y. M. Shui & Z. Y. Yu) N. Tanaka, comb. nov. *Ypsilandra jinpingensis* W. H. Chen, Y. M. Shui & Z. Y. Yu [in Shui S. M., Seed Pl. Honhe Reg. SE Yunna, China: 430 (Jun. 2003), sine descr.] in Bull. Bot. Res., Harbin 23 (3): 267, fig. 1 (p. 268) (Jul. 2003); Shui S. M. & Chen W. H., Seed Pl. Karst Reg. China 1: 199, fig. 545 (p. 199) (2006). Type: China. Yunnan. Jinping, Mt. Wutaishan, 2660 m, 3 Oct. 1996, S. G. Wu & al. 3742 (holotype in KUN-holotype, n.v.).

Ypsilandra yunnanensis W. W. Sm. & Jeffrey var. fansipanensis J. M. H. Shaw in Plantsman n.s. 7(1): 41, 2 figs (p.41) (2008), syn. nov. Type: Cultivated flowering plant pressed on 2 Oct. 2007, originally collected from Vietnam, Lào Cai Province, Mt. Fansipan, 2700 m, 1 Dec. 2006, B. Wynn-Jones & S. Wynn-Jones 11839 (holotype in WSY-holotype, n.v.; isotype in Herb. B.

Wynn-Jones-isotype, n.v.).

Flowering: September to October.

Distribution: China (SE Yunnan) and N Vietnam.

I thank an anonymous reviewer for helpful suggestions on the manuscript.

References

- Chen S. C. 1980. *Ypsilandra*. *In*: Wang F. T. & Tang Ts. (eds.), Flora Reipublicae Popularis Sinicae 14: 15–18. Science Press, Beijing (in Chinese).
- Chen W. H., Shui Y. M. and Yu Z. Y. 2003. A new species of *Ypsilandra* (*Liliaceae*) and its geographic implication of SE Yunnan Province. Bull. Bot. Res., Harbin 23 (3): 267–268 (in Chinese with English abstract).
- Kawano S. and Masuda J. 1980. The productive and reproductive biology of flowering plants VII. Resource allocation and reproductive capacity in wild populations of *Heloniopsis orientalis* (Thunb.) C. Tanaka (*Liliaceae*). Oecologia 45: 307–317.
- Shaw J. 2008. Three new Crûg Farm introductions. Plantsman n.s. 7(1): 39–43.
- Shui S. M. and Chen W. H. 2006. Seed Plants of the Karst Region in China 1 (Southeast Yunnan). Science Press, Beijing.
- Tanaka N. 1997a. Taxonomic significance of some floral characters in *Helonias* and *Ypsilandra* (*Liliaceae*). J. Jpn. Bot. 72 (2): 110–116.
- Tanaka N. 1997b. Phylogenetic and taxonomic studies on Helonias, Ypsilandra and Heloniopsis I. Comparison of character states (1). J. Jpn. Bot. 72 (4): 221–228.
- Tanaka N. 1997c. Phylogenetic and taxonomic studies on *Helonias*, *Ypsilandra* and *Heloniopsis* I. Comparison of character states (2). J. Jpn. Bot. **72** (5): 286–292.
- Tanaka N. 1997d. Phylogenetic and taxonomic studies on *Helonias*, *Ypsilandra* and *Heloniopsis* II. Evolution and geographical distribution. J. Jpn. Bot. **72** (6): 329–336.
- Tanaka N. 1998. Phylogenetic and taxonomic studies on Helonias, Ypsilandra and Heloniopsis III. Taxonomic revision. J. Jpn. Bot. 73 (2): 102–115.

中国雲南省東南部の高地(海抜 2660 m)から 2003 年に記載された Ypsilandra 属の1種 Y. Jinpingensis を広義のショウジョウバカマ属 Helonias (cf. Tanaka 1998) に移し、新組合せ H. Jinpingensis を提唱した。本種は、雲南省北西部、チベット、ブータン、ネパールおよびミャンマー

に分布する H. yunnanensis に近縁であるが、雄ずいが雌ずいより長く、花弁と等長かそれよりも長いこと、花柄はより長く、その基部に苞が存在すること、開花期が遅い(9~10月)こと等から独立種と判断した.一方、中国との国境に近いベトナム北部の高地(2700 m)から最近(2008 年)記載された 1 変種 Y. yunnanensis var. fansipanensis は、H. jinpingensis と生育地が極めて近く、形態的にも開花期等もよく一致するので、後者と同じ分類群に属するものと判断した.

Helonias jinpingensis は H. yunnanensis と 同様, 花柱が短く, 柱頭が深く3裂する. 花糸は H. yunnanensis のそれよりも長く, 葯が柱頭よりもずっと高い位置につく. H. jinpingensis のこれらの特徴は, 北米東部産の H. bullata の雌・雄ずいの特徴に近似しており, 本属のアジア産種(特に Ypsilandra 類)と北米産種(北米には H. bullata 1種のみが分布)との間の形態的な溝

を狭めている.この意味で、H. jinpingensis は本属種群の分化過程を探る上で、また本属の分類を考える上で大変興味深い種である.

アジア産の Ypsilandra と Heloniopsis の 2 属を 北米産の Helonias 属に移籍させた(Tanaka 1998) 根拠についても言及した. 3 属はいくつかの形 質で異なるが、それらの差異の程度は属ランク で種群を区分するほど大きなものではないと見 受ける. これらの 3 属は多くの基本的な性質を 共有し、基本部分でよく類似しているので、1 属 として捉えるのがより妥当と考える.

> (Department of Education, School of Liberal Arts, Teikyo University, 359 Otsuka, Hachioji, Tokyo, 192-0395 JAPAN E-mail: ntanaka@main.teikyo-u.ac.jp 帝京大学文学部教育学科)

> > 植物研究雑誌 84: 191-193 (2009)

コウヤハリスゲの屋久島産新変種, コケハリガネスゲ (勝山輝男 ^a, 織田二郎 ^b) Teruo Katsuyama ^a and Jiro Oda ^b: *Carex koyaensis* var. *yakushimensis* (*Cyperaceae*), a New Variety from Yakushima Island, Japan

Summary: A new variety of *Carex koyaensis* J. Oda & Nagam., var. *yakushimensis* Katsuy. & J. Oda, is here described. It is distinguished from the typical variety by short culms (2–7 cm long), filiform leaves (up to 0.5 mm wide) and small perigynia (ca. 1 mm long).

勝山(2005)は屋久島産の矮小型のハリガネスゲと近畿地方~中国地方に分布する 匐枝を出すハリガネスゲを写真で紹介した. その後, Oda and Nagamasu (2008) は後者を新種コウヤハリスゲ *Carex kouyaensis J.* Oda & Nagam. として記載した. 屋久島産の矮小型ハリガネスゲは匐枝を出すことと小穂の花数が少ない点で, ハリガネスゲよりもコウヤハリスゲに似ている (Fig. 1). Oda and Nagamasu (2008) は匐枝や小穂のほかに, 痩

果の表面の模様が異なることを両者の大きな相違点としている. ハリガネスゲではプラットフォーム上の垂層に沿って 13-20 個の周辺体があるが, コウヤハリスゲでは中央体のみで周辺体がなく, しばしば垂層壁がハチの巣状になる.

屋久島産の矮小型ハリガネスゲの痩果の 模様を Oda and Nagamasu (2008) と同じ方法 (アセトリシス処理の後,走査型顕微鏡で観 察する)で調べたところ,プラットフォー ム上には,中央体のみで周辺体が認められ ないことと,垂層壁がハチの巣状であるこ とから(Fig. 2),コウヤハリスゲに類似する. そこで,屋久島産の矮小型ハリガネスゲを コウヤハリスゲの新変種として記載し,コ ケハリガネスゲの和名をつけた.

コケハリガネスゲは有花茎が著しく低く.