

## Hybrids in *Crepidiastrum* (Asteraceae)

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*Crepidiastrixeris* has been recognized as an intergeneric hybrid between *Crepidiastrum* and *Ixeris*, *Paraixeris* or *Youngia*, but the name is illegitimate. Three hybrid species have been recognized under the designation. Two of the three nothospecies are newly included and named in *Crepidiastrum*. *Crepidiastrum* × *nakaii* H. Ohashi & K. Ohashi is proposed for a hybrid previously known in hybrid formula *Lactuca denticulatoplatyphylla* Makino or *Crepidiastrixeris denticulato-platyphylla* (Makino) Kitam. *Crepidiastrum* × *muratagenii* H. Ohashi & K. Ohashi is described based on a hybrid between *C. denticulatum* (Houtt.) J. H. Pak & Kawano and *C. lanceolatum* (Houtt.) Nakai instead of a previous designation *Crepidiastrixeris denticulato-lanceolata* Kitam.

**Key words:** Asteraceae, *Crepidiastrixeris*, *Crepidiastrum*, intergeneric hybrid, nothospecies.

Hybrids between *Crepidiastrum* and *Ixeris*, *Paraixeris* or *Youngia* have been treated as members of ×*Crepidiastrixeris* (Kitamura 1937, Hara 1952, Kitamura 1955, Ohwi and Kitagawa 1992, Koyama 1995). It was introduced as a representative of intergeneric hybrid (Knobloch 1972). Hybridity of ×*Crepidiastrixeris denticulato-platyphylla* (Makino) Kitam. (= *Lactuca* × *denticulato-platyphylla* Makino) has been confirmed in cytology and genetics (Ono and Satô 1935, Ono 1937, 1938, Saito et al. 2003, 2006). Three hybrid species are recorded in ×*Crepidiastrixeris*: ×*C. denticulato-lanceolata*, ×*C. denticulato-platyphylla* and ×*C. surugensis* (Kitamura 1955, Koyama 1995). These names were, however, erroneously proposed in nomenclature. This paper intends to clarify their taxonomic position and nomenclature. This study has been made on examination of herbarium

specimens kept at the herbaria of Kyoto University (KYO), University of Tokyo (TI) and Tohoku University (TUS).

### Taxonomic history of the hybrids

The first hybrid known as a member of the present ×*Crepidiastrixeris* was found by Makino (1917). He described the hybrid in the genus *Lactuca* as that between *L. denticulata* Maxim. and *L. lanceolata* Makino var. *platyphylla* Makino and named it *L. denticulato-platyphylla* Makino. Makino (1917) characterized morphology of the hybrid and showed the differences between it and its supposed parents in habit, stem, leaves, heads, and flowers. When Nakai (1920) established the genera *Crepidiastrum* Nakai and *Paraixeris* Nakai, he included *Lactuca lanceolata* and *L. lanceolata* var. *platyphylla* in *Crepidiastrum* as *C. lanceolatum* (Houtt.) Nakai and *C.*

*lanceolatum* var. *latifolium* Nakai, respectively, whereas he included *L. denticulata* and *L. ×denticulatoplatyphylla* in *Paraixeris* as *P. denticulata* (Maxim.) Nakai and *P. denticulato-platyphylla* (Makino) Nakai, respectively.

Following Nakai's generic concept, Kitamura (1937) considered that *Lactuca ×denticulatoplatyphylla* Makino is an intergeneric hybrid between *Crepidiastrum* and *Ixeris* and named the nothogenus *×Crepidiastrixeris* Kitam. Later, Kitamura (1955) treated *×Crepidiastrixeris* as a hybrid between *Crepidiastrum* and *Youngia*. Recently, Pak and Kawano (1992) united *Paraixeris* with *Crepidiastrum* and proposed a new combination *Crepidiastrum denticulatum* (Houtt.) J. H. Pak & Kawano. While the taxonomic position of one parent of *×Crepidiastrixeris* has changed from *Lactuca* (Makino 1917) through *Paraixeris* (Nakai 1920), *Ixeris* (Kitamura 1937) and *Youngia* (Kitamura 1955) to *Crepidiastrum* (Pak and Kawano 1992), the name *×Crepidiastrixeris* has not been changed.

#### Generic name *×Crepidiastrixeris*

When *×Crepidiastrixeris* was proposed, Kitamura (1937) adopted *Ixeris denticulata* (Houtt.) Nakai, rather than *Paraixeris denticulata* (Houtt.) Nakai, as one of the parents instead of the previous *Lactuca denticulata* (Houtt.) Maxim. considered by Makino (1917). Kitamura (1937) quoted the name in *Ixeris* as “*Ixeris denticulata* Nakai in Tokyo Bot. Mag. XXXIV (1920) p. 155” (on page 236 in Act. Phytotax. Geob. vol. 6. 1937) as if it was correctly published by Nakai (1920), although Nakai (1920) himself clearly adopted *Paraixeris denticulata*. The nothogenus was named *×Crepidiastrixeris* that is apparently derived from a combination of *Crepidiastrum* and *Ixeris*, but Kitamura did not specify *Ixeris* as one of the parents of the nothogenus. The name is, therefore, invalid because its publication

lacks a statement of the names of one of the parent genera (cf. ICBN H.9.1 in McNeill et al. 2006). *×Crepidiastrixeris* was treated again by Kitamura (1955) with citation of parent genera as “*Crepidiastrum ×Youngia*”, but it is invalid for the name of nothogenus between *Crepidiastrum* and *Youngia*, because *×Crepidiastrixeris* does not adopt *Youngia* as one of the names of parental genera combining into a single word (cf. ICBN H.6.2 in McNeill et al. 2006).

While the treatment for generic concept by Pak and Kawano (1992) is acceptable, *×Crepidiastrixeris* was not treated by them in *Crepidiastrum*, perhaps because *×Crepidiastrixeris* is invalid. However, all the parents of the species in *×Crepidiastrixeris* are included in *Crepidiastrum*, hence it is appropriate to shift the hybrids in *×Crepidiastrixeris* to *Crepidiastrum*.

#### Specific names for the hybrids

*Lactuca ×denticulatoplatyphylla* Makino was proposed as the name for the hybrid between *Lactuca denticulata* and *L. lanceolata* var. *platyphylla* (Makino 1917). The word *denticulatoplatyphylla* is combined with epithets of the parents. Accordingly, *denticulatoplatyphylla* is a formula, not a true epithet (ICBN H.10.3 in McNeill et al. 2006). The designation *Lactuca ×denticulatoplatyphylla* Makino is not to be considered as the specific name for the hybrid. Nakai (1920) treated Makino's designation as a name under *Paraixeris* to be *P. denticulato-platyphylla* (Makino) Nakai. Nakai's designation is not also regarded as the specific name for the hybrid, because it is based on a formula designating Makino's hybrid (ICBN 23.6(d) in McNeill et al. 2006). Accordingly, there is no name for the hybrid founded by Makino (1917).

Kitamura (1937) treated *Paraixeris surugensis* Hisauti as a member of *×Crepidiastrixeris*, and made a new combination for the species; *×C. surugensis*

(Hisauti) Kitam. This name is also invalid under  $\times$ *Crepidiastrixeris*. Yonekura (2005) treated this hybrid in *Crepidiastrum*.

Kitamura (1942) added a third hybrid to  $\times$ *Crepidiastrixeris* as  $\times$ *C. denticulato-lanceolata* Kitam. that was presumed to be a hybrid between *Crepidiastrum lanceolatum* and *Youngia denticulata*. The epithet-like word “*denticulato-lanceolata*” was combined from the epithets of the parents. Accordingly, *denticulatoplatyphylla* should be regarded a formula, not a true epithet (ICBN H.10.3 in McNeill et al. 2006).  $\times$ *Crepidiastrixeris denticulato-lanceolata* Kitam. is not to be considered the specific name for the hybrid. A new name for this hybrid is, therefore, proposed in this paper.

### Enumeration of the hybrids

***Crepidiastrum*** Nakai in Bot. Mag. (Tokyo) **34**: 147 (1920); Pak & Kawano in Mem. Fac. Sci. Kyoto Univ. ser. Biol. **15**: 50 (1992).

[ $\times$ *Crepidiastrixeris* Kitam. in Act. Phytotax. Geob. **6**: 235 (1937), nom. illeg.; H. Hara, Enum. Sperm. Jap. 188 (1952); Ohwi, Fl. Jap. 1251 (1953); Kitam. in Mem. Coll. Sci., Univ. Kyoto, ser. B, **22**: 115 (1955); Ohwi, Fl. Jap. ed. rev. 1418 (1965); Knobloch in Taxon **21**: 100 (1972); Ohwi & Kitag., New Fl. Jap. rev. 1569 (1992); H. Koyama in K. Iwatsu. & al., Fl. Jap. **IIIb**: 24 (1995)].

1. ***Crepidiastrum***  $\times$ ***nakaii*** H. Ohashi & K. Ohashi, hybr. nov. [Figs. 1–2] = *Crepidiastrum denticulatum* (Houtt.) J. H. Pak & Kawano  $\times$  *C. platyphyllum* (Franch. & Sav.) Kitam.

*Lactuca*  $\times$ *denticulatoplatyphylla* Makino in J. Jap. Bot. **1**: 11 (1917); F. Maek. & al., Makino’s New Illust. Fl. Jap. 688, fig. 2750 (1961).

[*Paraixeris denticulato-platyphylla* (Makino) Nakai in Bot. Mag. (Tokyo) **34**: 157 (1920), nom. illeg.].

[ $\times$ *Crepidiastrixeris denticulato-platy-*

*phylla* (Makino) Kitam. in Act. Phytotax. Geob. **6**: 235 (1937), nom. illeg.; H. Hara, Enum Sperm. Jap. **2**: 188 (1952); Ohwi, Fl. Jap.: 1251 (1953); Kitam. in Mem. Coll. Sci., Univ. Kyoto, ser. B, **22**: 115 (1955); Ohwi, Fl. Jap. ed. rev. 1418 (1965); Ohwi & Kitag., New Fl. Jap. rev. 1569 (1992); H. Koyama, Fl. Jap. **IIIb**: 24 (1995); Lee, Lineamenta Fl. Korea: 1135 (1996); T. Ohba in Chibaken no shizenshi 4, Chibaken shokubutsushi: 647 (2003)].

*Crepidiastrum platyphyllum*  $\times$  *Paraixeris denticulata*: Ono & al., Revised Makino’s New Illust. Fl. Jap. 826, fig. 3303 (1989).

Hybrida e *Crepidiastro denticulato* (Houtt.) J. H. Pak & Kawano et *C. platyphylo* (Franch. & Sav.) Kitam. exorta, inter parentes media praeter magnum semen. Differt ab *Crepidiastro denticulato* caule valido sine stolone, folio leviter crasso, capitulo denso, flosculo minori 8–11 (12–15 in *C. denticulato*); ab *C. platyphylo* caule et ramo gracili, folio minori amplexicauli paucidenticulato, flosculo numerosi (5–6 in *C. platyphylo*).

**Type**: Japan. central Honshu. Kanagawa Prefecture. Hayama. Nov. 1921. T. Nakai (TI–holo, iso). [Figs. 1A, B]

**Distr.**: Japan. central Honshu: Chiba, Tokyo (Is. Miyake), Kanagawa (Miura Peninsula) and Shizuoka (Izu Peninsula) Prefectures; and south Korea.

**Japanese name**: Yakushi-wadan (Makino 1917).

The epithet is dedicated to Dr. Takenoshin Nakai who created *Crepidiastrum* and *Paraixeris*.

$\times$ *Crepidiastrixeris denticulato-platyphylla* (Makino) Kitam. has been applied as a scientific name for the hybrid between *Crepidiastrum platyphyllum* and *Ixeris denticulata* (Kitamura 1937), *Youngia denticulata* (Kitamura 1955, Ohwi 1953, 1965b, Ohwi and Kitagawa 1992) or *Paraixeris denticulata* (Hara 1952, Knobloch 1972, Koyama 1995, Saito et al.

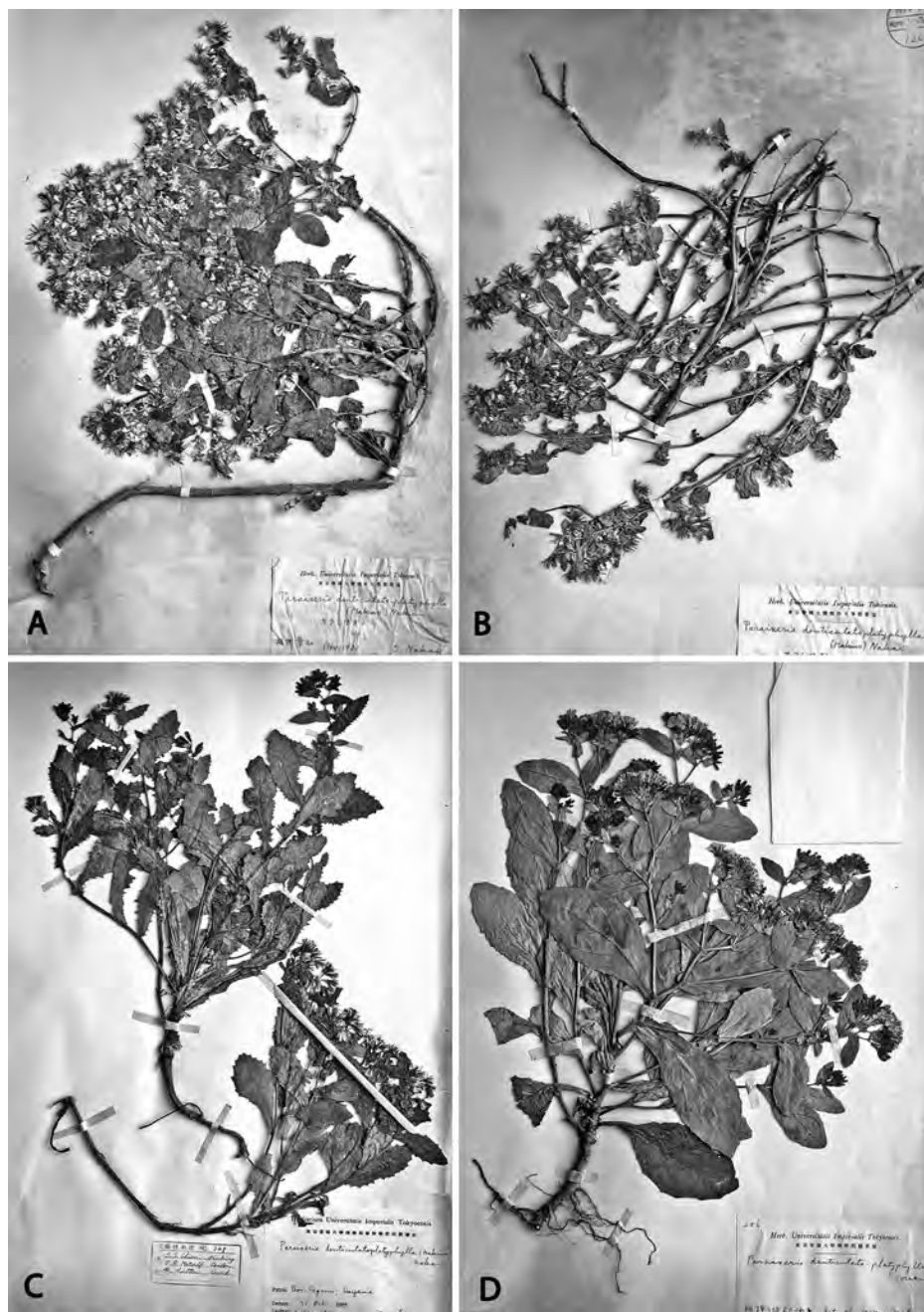


Fig. 1. *Crepidiastrum*  $\times$ *nakaii* H. Ohashi & K. Ohashi. A. Holotype of *C. xnakaii* (TI). B. One of the isotypes of *C. xnakaii*, collected by T. Nakai in Nov. 1921 at Hayama in Kanagawa Prefecture (TI). C. Juvenile individuals, collected by K. Hisauti on 31 October 1919 at Hayama in Kanagawa Prefecture (TI). It is determined by Nakai and the label was written by himself. D. A broad-leaved form collected by Y. Momiyama on 25 Oct. 1927 at Aburatsubo in Kanagawa Prefecture (TI). It was determined by Nakai and the label was written by himself.

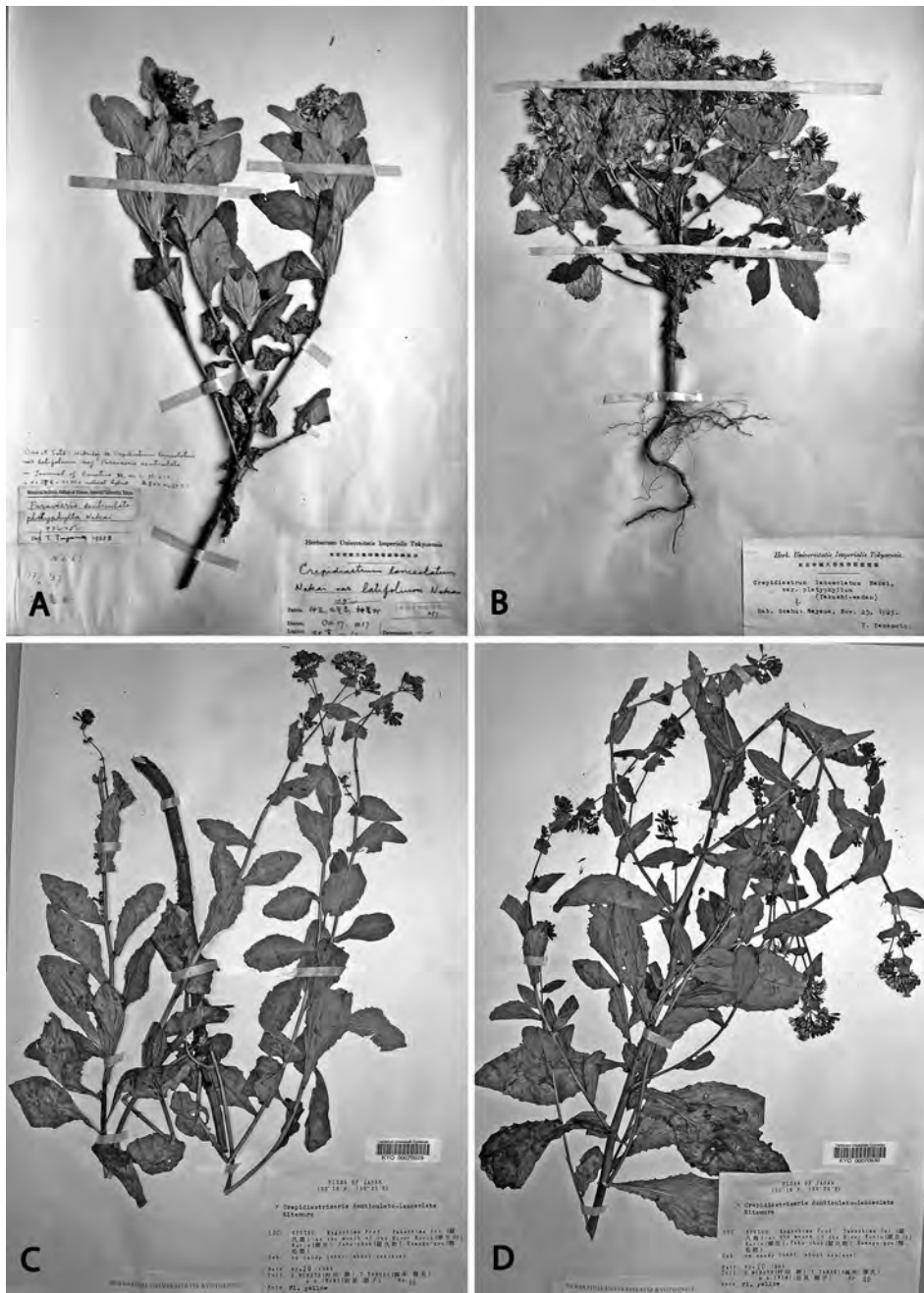


Fig. 2. *Crepidiastrum* *xnakaii* H. Ohashi & K. Ohashi and *C. xmuratagenii* H. Ohashi & K. Ohashi. A. *C. xnakaii* collected by N. Hayashi on 17 Oct. 1917 from Is. Miyake-jima in Tokyo Prefecture (TI). B. *C. xnakaii* collected by Y. Yamamoto on 25 Nov. 1923 at Hayama in Kanagawa Prefecture (TI). C. Holotype of *C. xmuratagenii* (TI). D. One of the isotypes of *C. xmuratagenii*, collected by G. Murata, T. Takagi and A. Iwami on 10 Nov. 1983 from Is. Yakushima, Kagoshima Prefecture (KYO).

2003, 2006).

Ohmori (1992) compared morphology of the hybrid with its parents in Miura Peninsula and noted that seeds of the hybrid are larger than those of the parental species (all in average length  $\times$  width in mm:  $3.3 \times 0.6$  in *Crepidiastrum platyphyllum*,  $2.8 \times 0.5$  in *C. denticulata* and  $3.9 \times 0.7$  in *C. \times nakaii*).

2. **Crepidiastrum**  $\times$  **muratagenii** H. Ohashi & K. Ohashi, hybr. nov.

[Figs. 2C, D, 3–4]

= *Crepidiastrum denticulatum* (Houtt.) J. H. Pak & Kawano  $\times$  *C. lanceolatum* (Houtt.) Nakai.

[ $\times$ *Crepidiastrixeris denticulato-lanceolata* Kitam. in Act. Phytotax. Geob. **11**: 132 (1942), nom. illeg., incl. specim. ex “insula Ainoshima. Hatsusima”; H. Hara, Enum Sperm. Jap. **2**: 188 (1952); Ohwi, Fl. Jap. 1251 (1953); Kitam. in J. Jap. Bot. **20**: 198 (1944) & in Mem. Coll. Sci., Univ. Kyoto, ser. B, **22**: 116 (1955); Ohwi, Fl. Jap. ed. rev. 1418 (1965); Knobloch in Taxon **21**: 100 (1972); Ohwi & Kitag., New Fl. Jap. rev. 1569 (1992); H. Koyama, Fl. Jap. **IIIb**: 25 (1995); Hatus., Fl. Kyushu: 218 (2004)].

Hybrida e *Crepidiastro denticulato* (Houtt.) J. H. Pak & Kawano et *C. lanceolato* (Houtt.) Nakai exorta, inter parentes media. Differt ab *Crepidiastro denticulato* rhizomate crasso, caule valido, folio leviter crasso chartaceo (membranaceo in *C. denticulato*), flosculo minori 8–12 (12–15 in *C. denticulato*); ab *C. lanceolato* sine stolone, sine folio radicali, caule et ramo gracili, folio minori amplexicauli paucidenticulato.

**Type:** Japan. Kyushu. Kagoshima Pref. Yakushima. Yaku-cho, Kurio, at the mouth of the river Kurio. On sandy coast, about sea level. 10 Nov. 1983. G. Murata, T. Takagi & A. Iwami 40 (KYO–holo, iso; TI–iso).

Distr.: Japan: Kyushu; Korea and China.

Japanese name: Yakushi-hosoba-wadan

(Kitamura 1942).

The new epithet, *muratagenii*, is dedicated to Mr. Gen Murata of Kyoto University, who has been a long-time contributor to the Flora of Japan, the Himalaya and SE Asia, making a great number of excellent herbarium specimens for KYO and many other herbaria including TI and TUS.

$\times$ *Crepidiastrixeris denticulato-lanceolata* Kitam. from China was reported by Kitamura (1944) and from Korea by Kitamura (1955).

$\times$ *Crepidiastrixeris denticulato-platyphylla* Kitam. was published as a nothospecies between *Crepidiastrum lanceolatum* and *Youngia denticulata*. It was described on the basis of a type specimen; “Kagoshima, Isl. Amami-Oshima, inter Nase et Yamato. G. Koidzumi, 29 Apr. 1923 (KYO)” (Fig. 3B). However, identity of this specimen (as Koidzumi specimen hereafter) was suggested by Hatusima (1971) as a broadly leaved or pinnately leaved form of *Crepidiastrum lanceolatum*. He noted that such forms of *Crepidiastrum lanceolatum* are common in the type locality, and *Youngia denticulata* does not occur in Amami O-shima. After examining the Koidzumi specimen and another specimen, i. e., “Chikuzen: insula Ainoshima (S. Hatusima)” (as Hatusima specimen hereafter, Fig. 3C), cited in the protologue of  $\times$ *Crepidiastrixeris denticulato-lanceolata* Kitam. in KYO, we recognized the Koidzumi specimen is *Crepidiastrum lanceolatum* and the Hatusima specimen is a hybrid between *Crepidiastrum denticulatum* and *C. lanceolatum*.

The Koidzumi specimen shows the common features of *Crepidiastrum lanceolatum* as described by Ohwi (1965a) and Koyama (1995), but has lobed radical leaves. The radical leaves of the species are described as entire and in fact are mostly entire, but often lobed or parted (Fig. 3A) or mixed entire, more or less lobed and parted (Fig. 3D). We noted that cauline leaves of  $\times$ *Crepidia-*

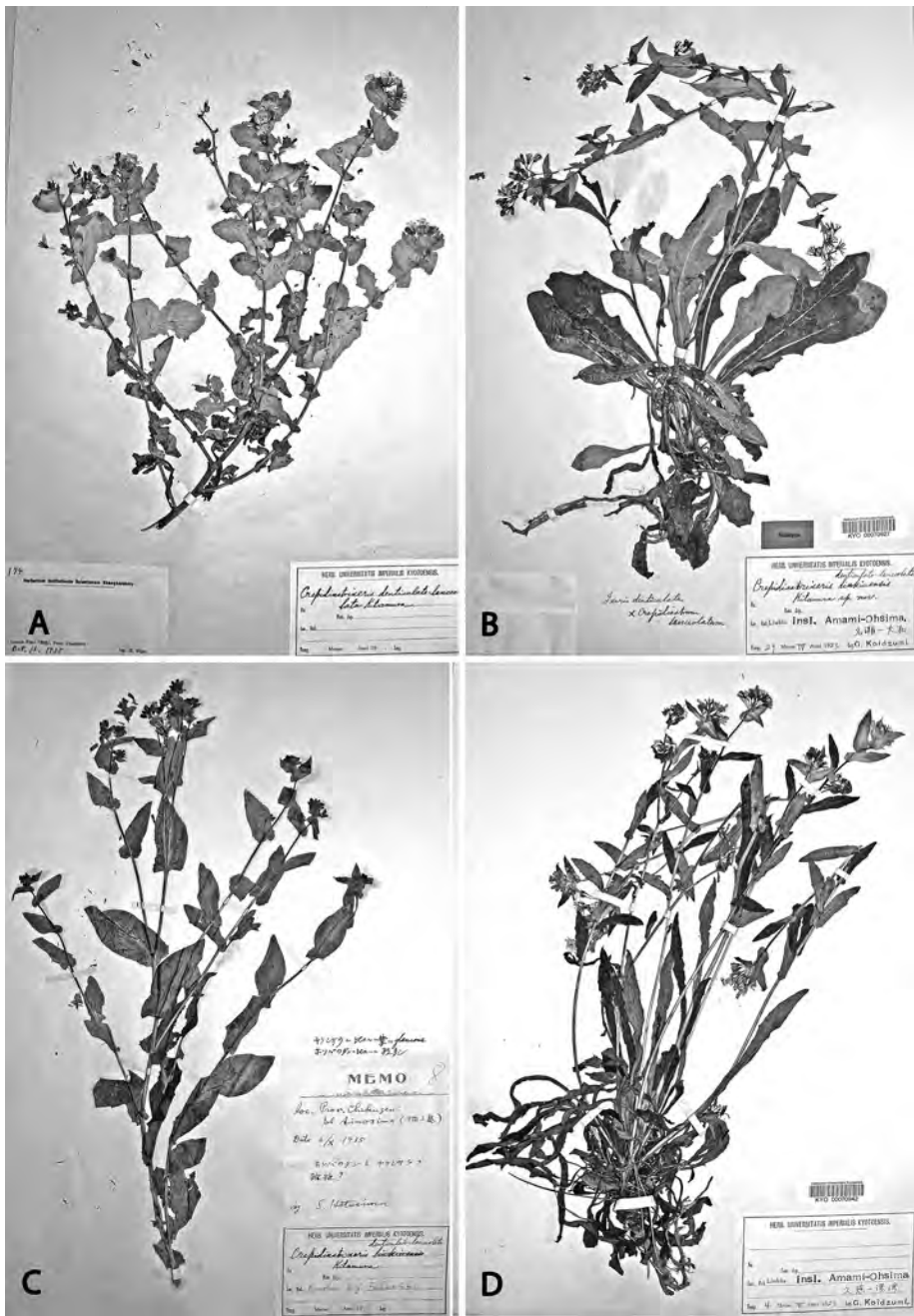


Fig. 3. *×Crepidiastrixeris denticulato-lanceolata* Kitam. and *Crepidiastrum lanceolatum* (Houtt.) Nakai. A. A Chinese specimen (China, Chekiang, insula Puto, 13 Oct. 1935, H. Migo 174, KYO) referred by Kitamura to *×Crepidiastrixeris denticulato-lanceolata* Kitam. B. *Crepidiastrum lanceolatum* (Houtt.) Nakai. The specimen referred to holotype of *×Crepidiastrixeris denticulato-lanceolata* Kitam. collected by G. Koidzumi between Nase and Yamato in Is. Amami-Oshima, Kagoshima Prefecture (KYO). C. The Hatusima specimen *×Crepidiastrixeris denticulato-lanceolata* Kitam. (KYO). D. *Crepidiastrum lanceolatum* (Houtt.) Nakai, a form with narrowly ovate, entire radial leaves, collected by G. Koidzumi between Kuji and Yuwan in Is. Amami-Oshima, Kagoshima Prefecture (KYO).

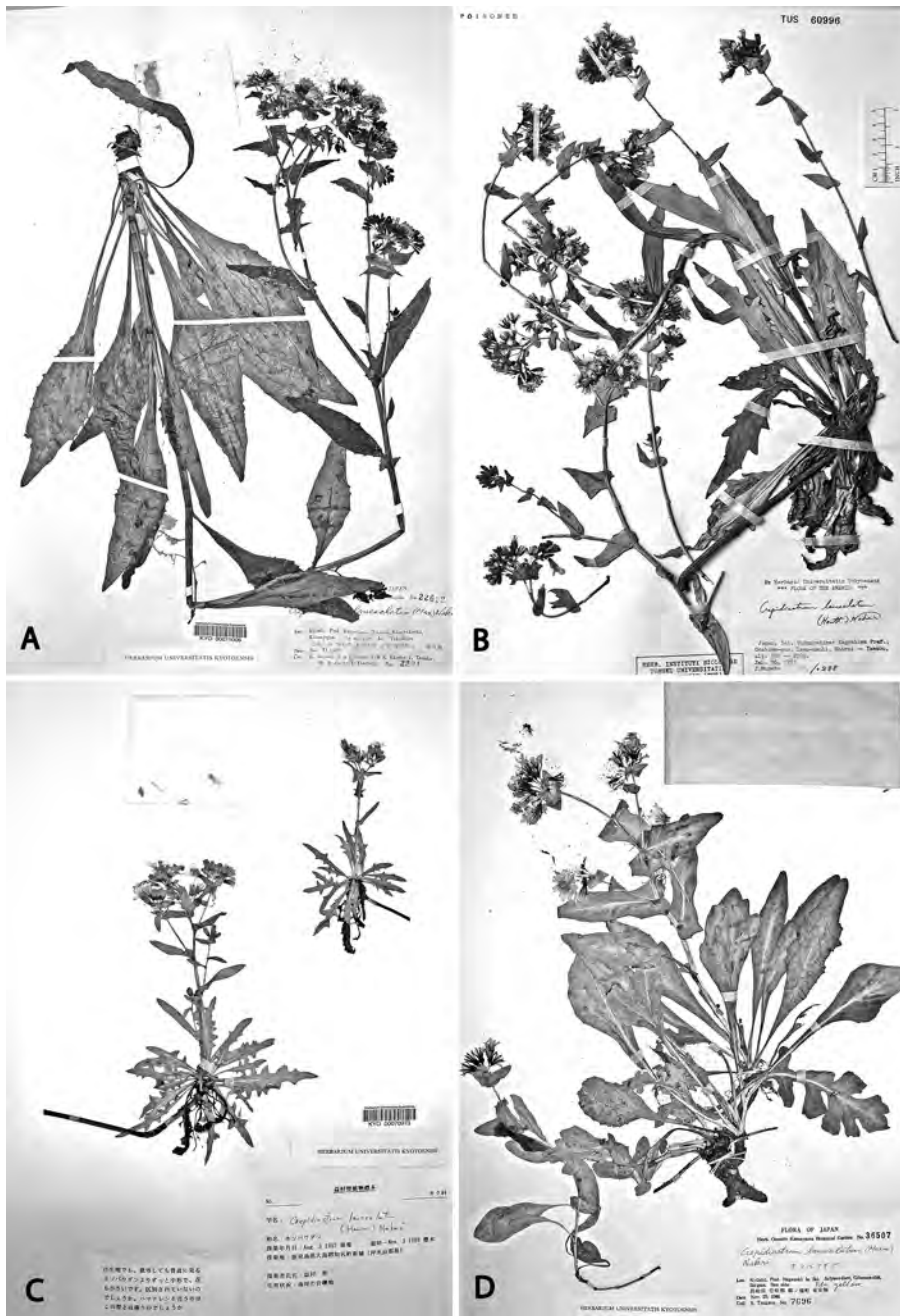


Fig. 4. *Crepidiastrum lanceolatum* (Houtt.) Nakai. A. A form with dentate, broad radial leaves, collected by K. Mimoro & al. 22612 in Is. Yakushima, Kagoshima Prefecture (KYO). B. A form with lobed, narrow radial leaves collected by J. Murata in Is. Okinoerabu-jima, Kagoshima Prefecture (TUS). C. A form with parted radial leaves (referable to f. *pinnatilobum* Nakai) collected by H. Masumura in Is. Okinoerabu, Kagoshima Prefecture (KYO). D. A form with entire, more or less lobed and parted radial leaves collected by S. Tsugaru in Is. Iki, Nagasaki Prefecture (KYO).





Fig. 5. A. Holotype of *Paraixeris surugensis* Hisauti (TI). B. *Crepidiastrum*  $\times$  *surugense* (Hisauti) Yonek. collected by Kitamura and Murata at Okinoshima in Kochi Prefecture, Shikoku (TI).

*strixeris denticulato-lanceolata* are thinner texture with acute serrations as in *Crepidiastrum denticulatum*, but those of *Crepidiastrum lanceolatum* are slightly thicker texture without serration. On the other hand, Hatusima specimen is not referable to *Crepidiastrum lanceolatum* in having thinner cauline leaves with a few acute serrations near base and not to *Crepidiastrum denticulatum* in having almost entire margin of cauline leaves.

A specimen, Murata & al. 40 (3 sheets in KYO, Figs. 2C, D) shows intermediate features between *Crepidiastrum denticulatum* and *C. lanceolatum* (Figs. 2C, D). The specimen referable to *Crepidiastrum*  $\times$  *muratagenii* differs from the parental

species in cauline leaves in having acute serrations similar to *C. denticulatum*, less serrated than it, and petiolate as in *C. lanceolatum*. It is similar to the former in lacking radical leaves in flowering and fruiting stages and having copiously branched stems, but differ from the latter in these points. It has a thick rhizome as in *C. lanceolatum*, but differs from *C. denticulatum* in this point. We selected this specimen as the type of *C. x muratagenii*.

3. *Crepidiastrum*  $\times$  *surugense* (Hisauti) Yonek. in J. Jpn. Bot. **80**: 331 (2005).

[Fig. 5]

= *Crepidiastrum denticulatum* (Houtt.) J. H. Pak & Kawano  $\times$  *C. keiskeanum* (Maxim.)

Nakai.

*Paraixeris surugensis* Hisauti in J. Jap. Bot. **10**: 697 (1934) [Type: Japan. Shizuoka Pref., Numazu, Ushibuse. 9 Nov. 1913. K. Hisauchi (TI holo, iso)].

[*×Crepidiastrixeris surugensis* (Hisauti) Kitam. in Act. Phytotax. Geobot. **6**: 236 (1937), nom. illeg.; H. Hara, Enum Sperm. Jap. **2**: 188 (1952); Ohwi, Fl. Jap.: 1251 (1953); Kitam. in Mem. Coll. Sci., Univ. Kyoto, ser. B, **22**: 115 (1955); Ohwi, Fl. Jap. ed. rev. 1418 (1965); T. Yamanaka, Veg. Fl. Kochi Pref. 385 (1978); Ohwi & Kitag., New Fl. Jap. rev. 1569 (1992); Koyama, Fl. Jap. **IIIb**: 24 (1995); Hatus., Fl. Kyushu: 218 (2004)].

Distr.: Japan: Honshu (Shizuoka Pref.), Shikoku (Kochi Pref.) and Kyushu (Oita Pref.).

Japanese name: Yakushi-azetona.

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## 大橋広好<sup>a</sup>, 大橋一晶<sup>b</sup>: キク科ヤクシワダン属の所属と学名

ヤクシワダン属×*Crepidiastrixeris* はヤクシソウとアゼトウナ属 3 種との間の 3 雑種種 *nothospecies* よりなる雑種属 *nothogenus* とされる (Kitamura 1955, Knobloch 1972, Ohwi and Kitagawa 1992, Koyama 1995). これらの分類群には分類学的問題と命名上の誤りが含まれている.

×*Crepidiastrixeris* はヤクシワダン属の学名として Kitamura (1937) によって発表された. この属名はアゼトウナ属 *Crepidiastrum* Nakai のワダンと *Ixeris* 属のヤクシソウとをつないで, これら 2 つの属間雑種名としたと考えられるが, Kitamura (1937) の発表では *Ixeris* 属についての記述を欠いている. このため国際植物命名規約付則 I の H.9.1 条 (McNeill et al. 2006) に規定されている正式発表の条件を欠く非合法的な発表であった. 後に Kitamura (1942, 1955) は ×*Crepidiastrixeris* Kitam. は *Crepidiastrum* と *Youngia* の雑種属であると明記したが, 今度は国際植物命名規約付則 I の H.6.2 条に反する命名となった. 結局, ×*Crepidiastrixeris* Kitam. は非合法名と見なされねばならない.

近年 Pak and Kawano (1992) はヤクシソウをアゼトウナ属 *Crepidiastrum* に移した. この見解による属の範囲の下ではヤクシワダン属はアゼトウナ属に含められることになる. しかし, Pak and Kawano (1992) はヤクシワダン属について採り上げなかったので, ヤクシワダン, ヤクシワダンおよびヤクシアゼトウナの学名はアゼトウナ属に移されないままに残っていた. Yonekura (2005) はヤクシアゼトウナをアゼトウナ属に組み替えたが, この種がヤクシワダン属に含められていることには触れなかった.

ヤクシソウをアゼトウナ属とする説は形態と染色体のうえから合理的であると思われる. この考えにしたがってわれわれはヤクシワダンとヤクシワダン属をアゼトウナ属に帰属させて学名を正すこととした.

ヤクシワダン *Lactuca* ×*denticulatoplatyphylla* Makino の種形容語は「片親の学名の形容語の語尾のみを変更してハイフンで結びつけて形容語と指定したもの」であり, 国際植物命名規約 H.10.3 条に規定される雑種式に相当する. Nakai (1920) は *Paraixeris* の下で *denticulato-platyphylla* を種形容語としたが, 国際植物命名規約 23.6(d) 条の規定により, これを種形容語とみなすことはできない. これらの理由でヤクシワダンには新学名が必要である. アゼトウナ属を設立した中井猛之進博士を記念して *Crepidiastrum* ×*nakaii* H. Ohashi & K. Ohashi とした. ヤクシワダンは牧野富太郎が 1915 年 11 月 7 日に神奈川県葉山で採集した標本に基づ

いて命名されたが, 今回この標本を TI では確認できなかった. しかし, TI には中井博士の採集品と同定品のヤクシワダンが多数あり, その中の 1 点をホロタイプとした (Fig. 1A). あわせて本種の形態的変異を示す (Figs. 1–2).

ヤクシワダンには学名として ×*Crepidiastrixeris denticulato-lanceolata* Kitam. が用いられている. この種形容語もヤクシワダンの場合と同様で, 国際植物命名規約 H.10.3 条に規定されている雑種式に相当する. このためヤクシワダンには学名がないことになる. われわれはこの雑種を新たに *Crepidiastrum* ×*muratagenii* H. Ohashi & K. Ohashi と命名し, 屋久島で採集された Murata et al. 40 (KYO) の一枚をホロタイプとした (Figs. 2C, D). 種形容語は村田 源氏に献名した. 村田氏は多くの研究上のご業績の他にも長い間多数のおし葉標本を作り, KYO のみならず TI, TUS を含む多くのハーバリウムを充実させて下さり, 分類学の基礎に大いに貢献して下さい.

なお, ×*Crepidiastrixeris denticulato-lanceolata* Kitam. の実体にも問題があると思われる. 初島 (1971) は, この雑種の学名のタイプとして引用された標本「奄美大島名瀬と山和の間. 小泉源一. 29 Apr. 1923 (KYO)」の同定に関してすでに疑問を呈している. 初島によれば, 奄美大島にはヤクシソウは自生せず, 名瀬と山和の間には「一見ヤクシワダンに似たホソバワダンの広葉型または葉の羽裂するヤクシワダン型のもの」が多いという. ×*Crepidiastrixeris denticulato-lanceolata* Kitam. という名称は正式な学名ではないので, そのタイプ標本はないが, タイプとされた標本 (Fig. 3A) を調べると, ホソバワダンに当たるとと思われる. われわれは初島の推測どおり, この標本はホソバワダンであると判定した.

ヤクシアゼトウナはヤクシソウ属 *Paraixeris* として命名され, そのホロタイプは TI にある (Fig. 5A). この種は Kitamura (1937) によってヤクシワダン属に移され, ×*Crepidiastrixeris surugensis* (Hisauti) Kitam. とされてきたが, これは非合法名である. アゼトウナ属での正名は *Paraixeris surugensis* Hisauti を組み替えた *Crepidiastrum* ×*surugense* (Hisauti) Yonek. である. なお *Paraixeris surugensis* の原発表では著者名は Hisauchi であるが, 久内清孝先生はご自身で Hisauti と綴られたこともあり, Brummitt and Powell: Authors of plant names (1992) では Hisauti に統一しているのでそれに従った.

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