

Taxonomic Studies of *Cirsium* (Asteraceae) in Japan XXI. Four New Species from Honshu, Central Japan

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Abstract Three new species (*Cirsium akimontanum*, *C. nagatoense* and *C. yuzawae*) of subsect. *Reflexae* and a new species (*C. yamauchii*) of subsect. *Tubelosae* are described from Honshu, Japan, within sect. *Onotrophe* of the genus *Cirsium*. *Cirsium akimontanum* Kadota described from Yamaguchi, Hiroshima and Shimane Prefs. is distinguished from *C. kagamontanum* Nakai by having subcoriaceous cauline leaves, short and thick peduncles, ascending involucrell phyllaries and lanceolate glandular bodies. *Cirsium nagatoense* Kadota described from the western part of Yamaguchi Pref. is characterized by having thick and coriaceous cauline leaves and the lowest elevation of habitats among the species of subsect. *Reflexae* (the *Cirsium kagamontanum* group). *Cirsium yuzawae* Kadota described Fukushima Pref. is characterized by patent and/or recurved involucrell phyllaries and the absence of glandular bodies. *Cirsium yamauchii* Kadota also described from Fukushima Pref. is a coastal plant and is unique in having lustrous, coriaceous cauline leaves.

Key words: *Cirsium akimontanum*, *Cirsium nagatoense*, *Cirsium yamauchii*, *Cirsium yuzawae*, Japan, new species.

Introduction

This is part of a revisional work on Japanese *Cirsium* (Asteraceae) (Kadota, 1989–2009; Kadota and Nagase, 1988).

During the course of systematic studies on Japanese *Cirsium* three entities within the subsect. *Reflexae* of sect. *Onotrophe* (Cass.) DC. were found in Fukushima, Shimane, Hiroshima Prefs., Honshu in October of 1998. Since then field and herbarium observations have been done for more than ten years. As a result these three entities will be described as new species; *Cirsium yuzawae* Kadota from Fukushima Pref., *C. akimontanum* Kadota from Shimane, Hiroshima and the eastern part of Yamaguchi Pref. and *C. nagatoense* Kadota from the western part of Yamaguchi Pref.

In November of 2008 a curious thistle was found at the Hattachi Kaigan [coast], Iwaki, Fukushima Pref., northern Honshu. Based on field survey conducted in October of 2009 as

well as specimen examinations of herbarium materials it turned out that this thistle is ascribable to a new species of sect. *Onotrophe* subsect. *Tubelosae* Kitam. This thistle will be also described here as *Cirsium yamauchii* after the discoverer of this new species.

Taxonomic treatment

Genus **Cirsium** Mill., Gard. Dict. Abringd. ed. 4, 1 (1754), emend. Scop., Fl. Carn. 355 (1760).

Sect. **Onotrophe** (Cass.) DC., Prodr. 6: 644 (1837).

Genus *Onotrophe* Cass. in Dict. Sci. Nat. 36: 145 (1825).

Ser. *Onotrophe* (Cass.) Maxim. in Bull. Acad. Sci. St.-Petersb. 19: 502 (1874).

Subsect. **Reflexae** (Kitam.) Kadota, Fl. Jap. **IIIa**: 148 (1995).

Ser. *Reflexe* Kitam. in Acta Phytotax. Geobot. 3: 5 (1934), p. p.

Ser. *Imbricatae* Kitam. in Acta Phytotax.

Geobot. 3: 5 (1934), p. p.

1. **Cirsium akimontanum** Kadota, sp. nov.

[Figs. 1–2]

Differt ab *Cirsio kagamontano*, foliis caulinis subcoreaceis, pedunculis brevioribus et crasioribus, phyllariis involucrium ascendentibus, vitiis lanceolatis.

TYPE: JAPAN: HONSHU; Hiroshima Pref., Hatsukaichi-shi, Yoshiwa, Nakatsu-dani Gorge 37°15'59.4"N 140°54'17.9"E, alt. 235 m, 14 Oct. 2009, Y. Kadota 097307 (TNS 742927–742928–holotype; Fig. 1).

A hermaphrodite, perennial, herbaceous plant, 1–2.5 m tall or taller. Rootstock stout, horizontal, up to 5 cm in diameter, with cord-like roots. Stem declining to suberect, well branched from the middle part, leafy, sparingly arachnoid and covered with short brownish hairs chiefly in the upper part. Basal leaves withering at anthesis. Lower cauline leaves dark yellowish green on the adaxial side, membranous, amplexicaul, auriculate, sessile; blades narrowly ovate to narrowly elliptic in outline, 20–42 cm, 6–18 cm broad, almost glabrous on both sides, shallowly pinnatilobate, 5–7-jugate; lobes ovate, 2.5–9 cm long, 1–3 cm broad, spreading, with weak spines 2–4 mm long. Middle and upper cauline leaves shallowly pinnatilobate to coarsely dentate, sessile. Flowers in September to October. Capitula 2–4 in a raceme, nodding, with peduncles 0.5–3 cm long; subtending leaves 3–5, ovate to linear, 1–3 mm long, with weak spines less than 1 mm long. Involucres narrowly cylindrical, 11–16 mm long, 5–6 mm (*in vivo*) and 1–1.5 cm (*in sicco*) in diameter, sparingly arachnoid. Phyllaries 11–12-seriate, adpressed; glandular bodies elliptic, glutinous or sometimes eglutinous; innermost phyllaries narrowly obovato-lanceolate, ca. 15 mm long; outer phyllaries ovate with acuminate tips, ca. 2 mm long, clearly shorter than the inner ones, herbaceous, terminated with weak spines ca. 1 mm long. Corollae pale pink, 16–18 mm long; lobes 4–5 mm long; throats 4–6 mm long; tubes 7 mm long, slightly longer than the throats. Achenes brownish gray to gray-

ish ivory-white, 3 mm long, ribbed; pappus sordid, 10–14 mm long.

Chromosome number: $2n=2x=34$ (present paper).

Japanese name: Geihoku-azami (nom. nov.).

Distribution: Western Honshu (Shimane, Hiroshima and Yamaguchi Prefs.). Endemic to Japan.

Etymology: The specific epithet “*akimontanum*” is derived from the name of the western part of Hiroshima Prefecture, western Honshu, Japan.

Additional specimens examined: JAPAN: HONSHU; **Hiroshima Pref.**, Hatsukaichi-shi, Yoshiwa, Nakatsu-dani Gorge, alt. 750 m, 23 Oct. 2008, Y. Kadota 088534 (TNS 777145–777146). **Shimane Pref.**, Kanoashi-gun, Nichihara-cho, Mt. Azoji-san, Okudani, alt. 740 m, 11 Oct. 2000, Y. Kadota 203061–203065, 203120–203123 (TNS 704447–704450, 704452–704456). Mino-gun, Hikimi-cho, Mt. Osorakan-san, Kameidani, alt. 500 m, 13 Oct. 2000, Y. Kadota 203107–203112 (TNS 704236–704242); Hikimi-cho, Nanamura, alt. 960 m, 12 Oct. 2000, Y. Kadota 203068–203072 (TNS 704574–704583).

Cirsium akimontanum is discriminated from *C. kagamontanum* by having subcoriaceous leaves, short and thick peduncles, ascending involucrial phyllaries and lanceolate glandular bodies (Fig. 2).

Cirsium akimontanum grows abundantly along the margin of summer-green woods in the montane zone, Yamaguchi (eastern part), Hiroshima and Shimane Prefs.

2. **Cirsium nagatoense** Kadota, sp. nov.

[Figs. 3–4]

Differt ab *Cirsio akimontano*, foliis coriaceis, phyllariis involucrium adpressis.

TYPE: JAPAN: HONSHU; Yamaguchi Pref., Hagi-shi, Kawakami, Shimo-Sasao, 37°19'29.8"N 131°29'24.2"E, alt. 250 m, 23 Oct. 2008, Y. Kadota 088530 (TNS 777195–holotype; Fig. 3).

A hermaphrodite, perennial, herbaceous plant, 0.7–2 m tall. Rootstock stout, horizontal, up to

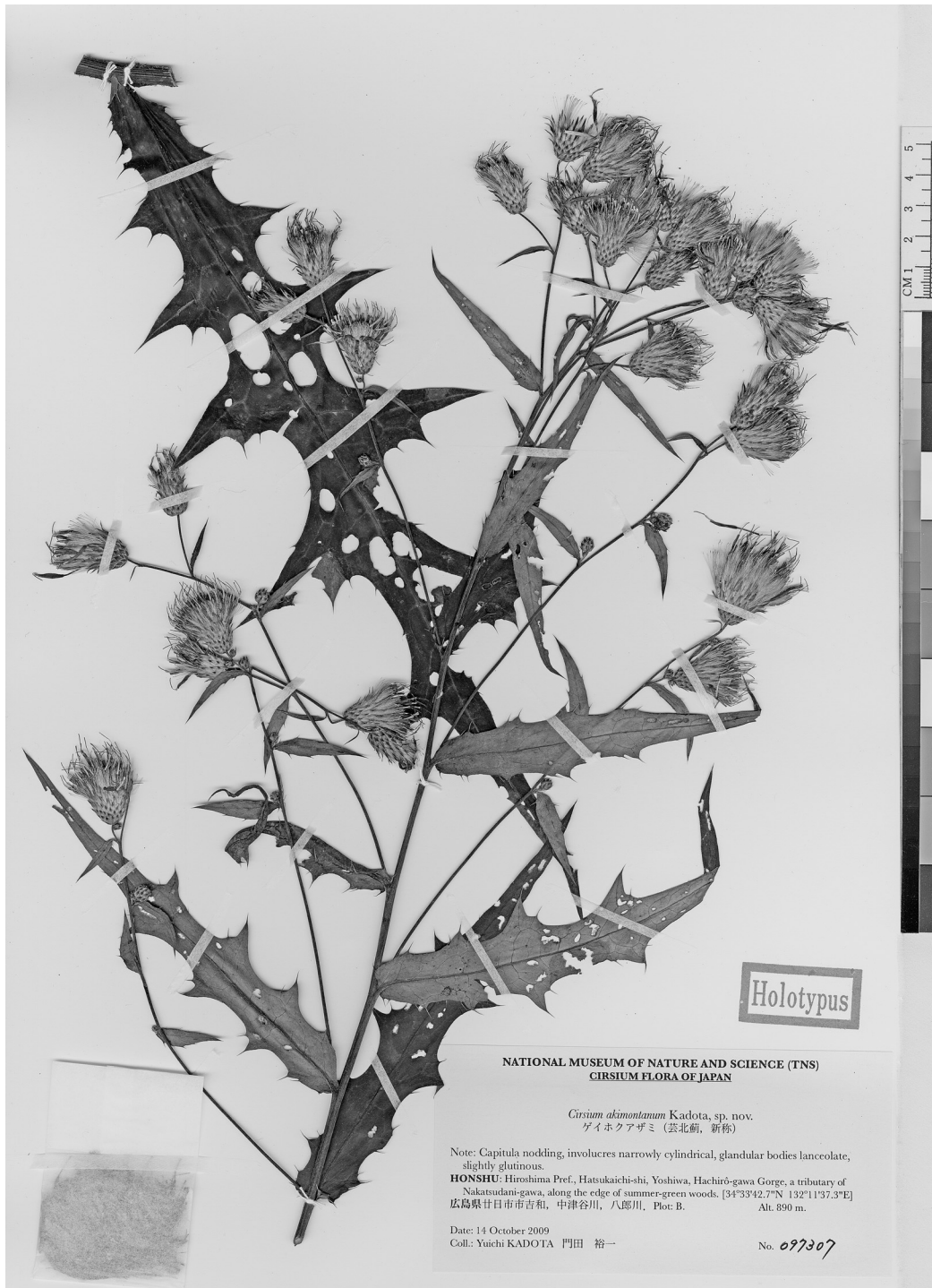


Fig. 1. Type specimen of *Cirsium akimontanum* Kadota (JAPAN: HONSHU; Hiroshima Pref., Hatsukaichi-shi, Yoshiwa, Nakatsudani-gawa Gorge, alt. 282 m, 14 Oct. 2009, Y. Kadota 097307, TNS 742927).



Fig. 2. Habit of *Cirsium akimontanum* Kadota (JAPAN: HONSHU; Hiroshima Pref., Hatsukaichi-shi, Yoshiwa, Nakatsudani-gawa Gorge, alt. 890 m, 14 Oct. 2009). Right corner inset shows nodding capitulum.



Fig. 3. Type specimen of *Cirsium nagatoense* Kadota (JAPAN: HONSHU; Yamaguchi Pref., Hagi-shi, Kawakami, Shimo-Sasao, alt. 250 m, 23 Oct. 2008, Y. Kadota 088530, TNS 777195).



Fig. 4. Habit of *Cirsium nagatoense* Kadota (JAPAN: HONSHU; Yamaguchi Pref., Hagi-shi, Kawakami, Shimo-Sasao, alt. 250 m, 23 Oct. 2008). Right corner inset shows nodding capitulum.

3 cm in diameter, with cord-like roots. Stem suberect to declining, well branched from the middle part, leafy, sparingly arachnoid and covered with short brownish hairs chiefly in the upper part. Basal leaves withering at anthesis. Lower cauline leaves deep green on the adaxial side, coriaceous, amplexicaul, auriculate, sessile; blades narrowly ovate in outline, 15–35 cm, 5–12 cm broad, almost glabrous on both sides, medially to shallowly pinnatilobate, 6–8-jugate; lobes ovate, 2–3 cm long, 1–2 cm broad, spreading, with strong spines 4–7 mm long, porrect. Middle and upper cauline leaves pinnatilobate to coarsely dentate, sessile. Flowers in October to November. Capitula 2–3 in a raceme or solitary, nodding, with peduncles (0–)2–15 mm long; subtending leaves 3–5, narrowly ovato-lanceolate to linear, 3–10 mm long, with sharp spines ca. 1 mm long. Involucres narrowly cylindrical, 15–17 mm long, (5–)6 mm (*in vivo*) and 1–1.5 cm (*in sicco*) in diameter, sparingly arachnoid. Phyllaries 11–12-seriate, adpressed; glandular bodies lanceolate, glutinous; innermost phyllaries narrowly

obovato-lanceolate, ca. 15 mm long; outer phyllaries broadly ovate with acute tips, ca. 3 mm long, clearly shorter than the inner ones, subcoriaceous, terminated with sharp spines ca. 1 mm long. Corollae pink to pale pink, 16 mm long; lobes 3–4 mm long; throats 6 mm long; tubes 6–7 mm long, slightly longer than or as long as the throats. Achenes brownish gray, 3 mm long, ribbed; pappus sordid, 9–12 mm long.

Chromosome number: $2n=2x=34$ (present paper).

Japanese name: Nagato-azami (nom. nov.).

Distribution: Western Honshu (the eastern part of Yamaguchi Pref.). Endemic to Japan.

Etymology: The specific epithet “*nagatoense*” is derived from the old name of the western part of Yamaguchi Prefecture, western Honshu, Japan.

Additional specimens examined: JAPAN: HONSHU; **Yamaguchi Pref.**, Hagi-shi, Kawakami, Shimo-Sasao, 37°19'29.8"N 131°29'24.2"E, alt. 250 m, 23 Oct. 2008, Y. Kadota 088527–088529, 088531 (TNS 777191–777192, 777196–

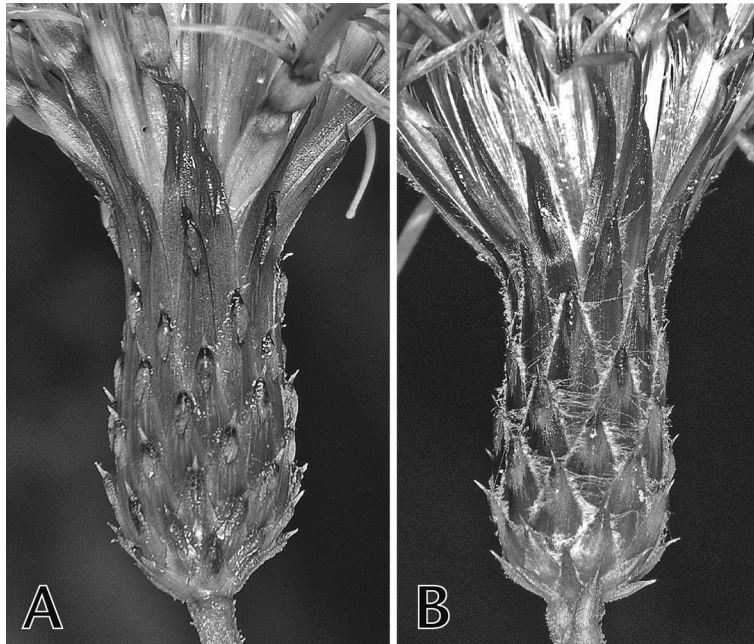


Fig. 5. Comparison in the shape of involucre phyllaries between *Cirsium akimontanum* (A) and *C. nagatoense* (B). A. JAPAN: HONSHU; Hiroshima Pref., Hatsukaichi-shi, Yoshiwa, Nakatsudani-gawa Gorge. B. JAPAN: HONSHU; Yamaguchi Pref., Hagi-shi, Kawakami, Shimo-Sasao.

777199).

Cirsium nagatoense (Fig. 4) is distinguished from *C. akimontanum* by coriaceous leaves and adpressed involucrel phyllaries. *Cirsium nagatoense* (Fig. 5B) is different from *C. akimontanum* (Fig. 5A) also in the shape of middle and outer involucrel phyllaries (broadly ovate vs. ovate). Glandular bodies of *C. nagatoense* are always well developed and the involucre are strongly glutinous while glandular bodies of *C. akimontanum* are frequently degenerated.

The range of *Cirsium nagatoense* is geographically segregated from that of *C. akimontanum*: *C. nagatoense* is distributed in the western half of Yamaguchi Pref. whereas *C. akimontanum* is distributed in the eastern half of Yamaguchi Pref., Hiroshima Pref. and the western half (Iwami Prov.) of Shimane Pref. The localities of *C. nagatoense* is the lowest in elevation within the *Cirsium kagamontanum* group.

3. *Cirsium yuzawae* Kadota, sp. nov.

[Figs. 6–7]

Differt ab *Cirsio horii*ano, phyllariis 11–12-seriatis, foliis caulinis inferiis et mediis ovatis vel late ovatis vel late ellipticis, pedunculis brevioribus et crassioribus, acheniis maginis; ab *C. tenuipedunculato*, phyllariis 11–12-seriatis, caule bene ramoso ramis ascendentibus, flosculis brevioribus, pedunculis brevioribus et crassioribus, acheniis minorioribus; ab *C. myokoensis*, phyllariis 11–12-seriatis, foliis caulinis inferiis et mediis profunde pinnatilobatis breviter petiolatis, lobiis foliorum patentibus, phyllariis mediis et exterinis involucrelorum longioribus et patentibus, involucriis crassioribus.

TYPE: JAPAN: HONSHU; Fukushima Pref., Futaba-gun, Naraha-machi, On'nadaira, Kido-gawa Gorge, near the Kurihashi-bashi bridge 37°15'59.4"N 140°54'17.9"E, alt. 235 m, 4 Oct. 2009, Y. Kadota 096165 (TNS 742921–742926–holotype; Fig. 6).

A hermaphrodite, perennial, herbaceous plant, 0.7–2.4 m tall or taller. Rootstock stout, horizontal, up to 3 cm in diameter, with cord-like roots. Stem declining to suberect, well branched from

the middle part, leafy, sparingly arachnoid and covered with short brownish hairs chiefly in the upper part. Basal leaves withering at anthesis. Lower cauline leaves deep green or sometimes variegated on the adaxial side, membranous, slightly amplexicaul, not auriculate, sessile; blades ovate to broadly ovate or broadly elliptic in outline, 22–40 cm, 6–28 cm broad, almost glabrous on both sides, deeply pinnatilobate or rarely subentire, if pinnatilobate, 5–7-jugate; lobes narrowly ovate, 6.5–12 cm long, 3–8 cm broad, spreading, with strong spines 5–10 mm long, porrect. Middle and upper cauline leaves pinnatilobate to coarsely dentate, sessile or short-petioled. Flowers in September to October. Capitula 3–4 in a raceme or sometimes solitary, nodding, with peduncles 1–6.5 cm long; subtending leaves 3–5, narrowly ovate-lanceolate, 0.5–2.5 cm long, with sharp spines ca. 1 mm long. Involucre narrowly cylindrical, ca. 16 mm long, 6–8 mm (*in vivo*) and 1.5–2 cm (*in sicco*) in diameter, sparingly arachnoid. Phyllaries 11–12-seriate, ascending to subpatent; glandular bodies absent, eglutinous; innermost phyllaries narrowly obovate-lanceolate, ca. 15 mm long; outer phyllaries ovate with acuminate tips, ca. 2 mm long, clearly shorter than the inner ones, herbaceous, terminated with sharp spines ca. 1 mm long. Corollae pale pink, 17–20 mm long; lobes 4 mm long; throats 5–6 mm long; tubes 8–10 mm long, clearly longer than the throats. Achenes grayish ivory-white, 3.5–4 mm long, ribbed; pappus sordid, 11–15 mm long.

Chromosome number: $2n=2x=34$ (present paper).

Japanese name: Iwaki-hime-azami (nom. nov.).

Distribution: Honshu (the Abukuma Height, Fukushima Pref.). Endemic to Japan.

Etymology: The specific epithet “yuzawae” is dedicated to Dr. Yōichi Yuzawa, Iwaki, Fukushima Pref., who devoted himself to survey this new thistle in Fukushima Pref., northern Honshu.

Additional specimens examined: JAPAN: HONSHU; **Fukushima Pref.**, Futaba-gun, Naraha-machi, Kido-gawa Gorge, alt. 320 m, 6 Oct. 1998, Y. Kadota 986062–986074 (TNS 676016–

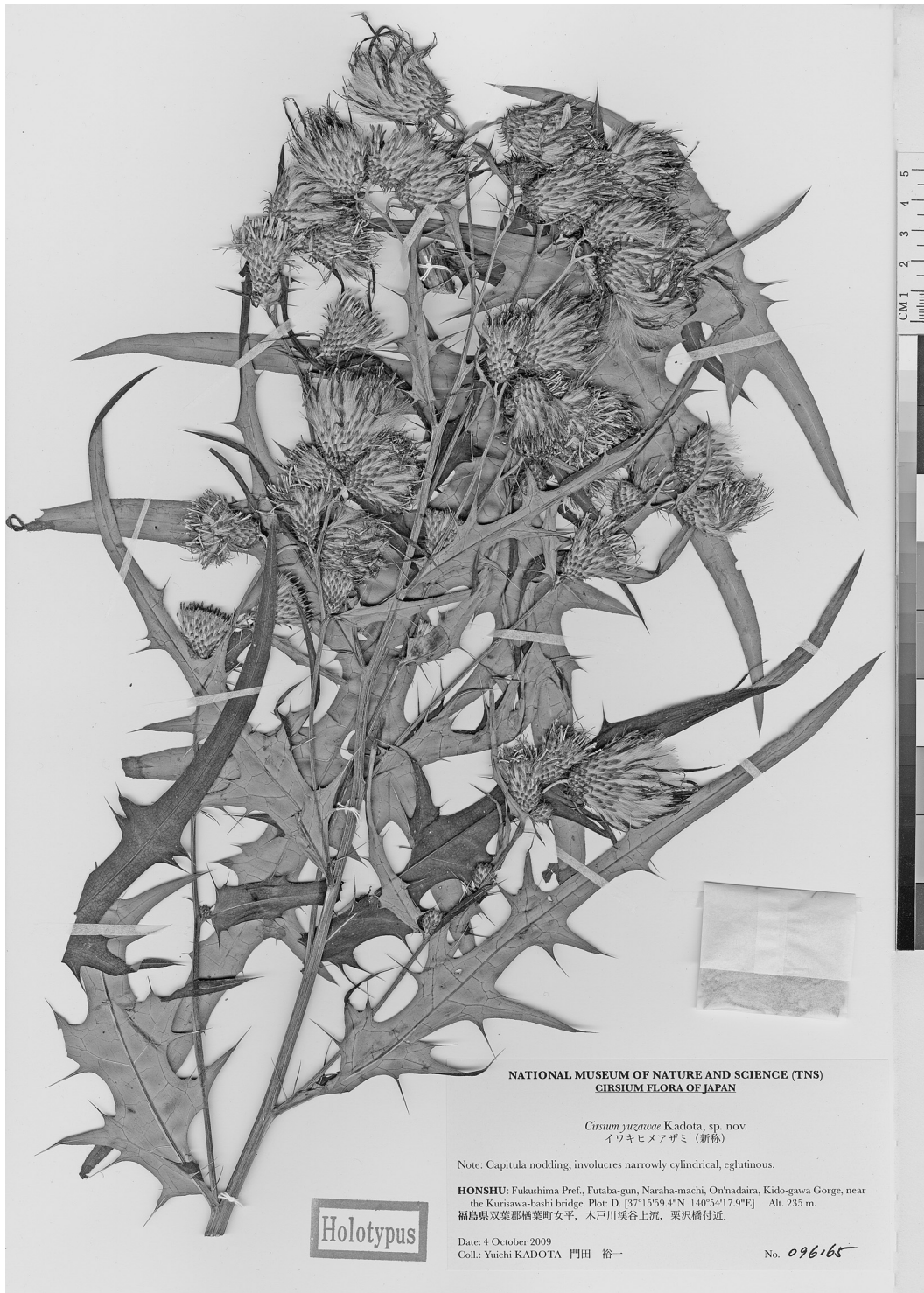


Fig. 6. Type specimen of *Cirsium yuzawae* Kadota (JAPAN: HONSHU; Fukushima Pref., Futaba-gun, Naraha-machi, On'nadaira, Kido-gawa Gorge, near the Kurisawa-bashi bridge, alt. 235 m, 4 Oct. 2009, Y. Kadota 096165, TNS 742921).



Fig. 7. Habit of *Cirsium yuzawae* Kadota (JAPAN: HONSHU; Fukushima Pref., Futaba-gun, Naraha-machi, On'nadaira, Kido-gawa Gorge, near the Kurihashi-bashi bridge, alt. 235 m, 4 Oct. 2009). Right corner inset shows nodding capitulum.

676031); Naraha-machi, On'nadaira, Kido-gawa Gorge, near the Kurihashi-bashi bridge, 37°15'59.4"N 140°54'17.9"E, alt. 235 m, 4 Oct. 2009, Y. Kadota 096161–096164, 096166–096170 (TNS); Naraha-machi, On'nadaira, near Kido Dam, 37°16'16.9"N 140°55'12.3"E, alt. 165 m, 4 Oct. 2009, Y. Kadota 096141–096142, 096145–096149 (TNS). Iwaki-shi, Kawamae-machi, Onigajô, 28 Nov. 1997, E. Fukazawa 97004 (TNS 652813); Iwaki-shi, Tabito-machi, "Mizunomi-ba", alt. 640 m, 4 Oct. 1998, Y. Kadota 986020–986025 (TNS 675892–675899).

In the subsect. *Reflexae* (Kitam.) Kadota [=the *Cirsium kagamontanum* group] the following three species are similar to *C. yuzawae* in having eglutinous involucre and spreading and/or long-recurved involucre phyllaries; *C. horiiianum* Kadota, *C. myokoense* Kadota and *C. tenuipedunculatum* Kadota. However, the three species above-stated are easily distinguished from *C. yuzawae* (Fig. 7) by having 9–10(–11)-seriate involucre phyllaries.

Cirsium horiiianum Kadota (2005) is discriminated from *C. yuzawae* by having ovate to obovate-elliptic cauline leaf blades, long and slender peduncles and larger achenes. *Cirsium horiiianum* is restricted to Oga Peninsula, Akita Pref., northern Honshu.

Cirsium myokoense Kadota (2009a) is different from *C. yuzawae* by having petiolate, shallowly pinnatifid cauline leaves with ascending lobes, longer and spreading involucre phyllaries and thicker involucre. *Cirsium myokoense* is restricted to Myôkô Mountains, Niigata Pref., central Honshu.

Cirsium tenuipedunculatum Kadota (1997; *C. effusum* auct. Jap. non (Maxim.) Matsum.) is discriminated from *C. yuzawae* by having divaricate branches, shorter florets, and longer and slender peduncles. *Cirsium tenuipedunculatum* is distributed in the Fuji-Hakone Floral Region, the northernmost part of the Akaishi Mountain Range and the Kanto Mountain Range (Chichibu Mountains), central Honshu.

In the vicinity of the type locality *Cirsium yuzawae* grows along the margin of secondary

woods consisting *Abies firma*, *Acer palmatum*, *Euptelea polyandra*, *Carpinus tschonoskii*, *Sasa borealis*, *Carpesium abrotanoides*, *Agastache rugosa* and so on. This type of forests is ascribable to the medium-temperate forest on the Pacific Ocean side of Tohoku District, northern Honshu.

Putative hybrids between *Cirsium yuzawae* and *C. microspicatum* were also found in the vicinity of the type locality, Kido Dam, Naraha-machi, Futaba-gun, Fukushima Pref. (Kadota 096143–096144). These hybrids are characterized by having sessile heads, glutinous involucre and ascending leaf lobes.

Subsect. **Tubelosae** Kitam. in Acta Phytotax. Geobot. 3: 5 (1934), p.p.

TYPE: *Cirsium suzukaense* Kitam.

Ser. *Imbricatae* Kitam. in Acta Phytotax. Geobot. 3: 5 (1934), p.p.

Ser. *Refexae* Kitam. in Acta Phytotax. Geobot. 3: 5 (1934), p.p.

4. *Cirsium yamauchii* Kadota, sp. nov.

[Figs. 8–9]

Differt ab *Cirsio takahashii*, foliis caulinis lucidis incrassatis scabris, absentia vittae, involucriis longioribus, pedunculis brevioribus; ab *C. heiiiano*, foliis caulinis lucidis incrassatis scabris, absentia vittae, phyllariis involuclorum integris late ovatis cum apivius caudatis longe recurvatis.

TYPE: JAPAN: HONSHU; Fukushima Pref., Iwaki-shi, Hisanohama-machi, Hattachi Kaigan [beach], in coastal herb stand, 37°07'07.3"N 140°59'58.2"E, alt. 5 m, 3 Oct. 2009, Y. Kadota 096132 (TNS 741839–741842–holotype; Fig. 8, hermaphrodite plant). Fukushima Pref., Iwaki-shi, Hisanohama-machi, Hattachi Kaigan, alt. ca. 5 m, 3 Oct. 2008, Y. Yuzawa and M. Yamauchi 23823 (TNS 779007–paratype; female plant).

A gynodioecious, perennial, herbaceous plant, 0.7–2 m high. Root stock stout, horizontal, up to 5 cm in diameter, with cord-like roots. Stem sulcate, declining to suberect, sparingly arachnoid, much branched from the middle part; branches not elongated. Basal leaves withering at anthesis. Middle cauline leaves deep green on the adaxial

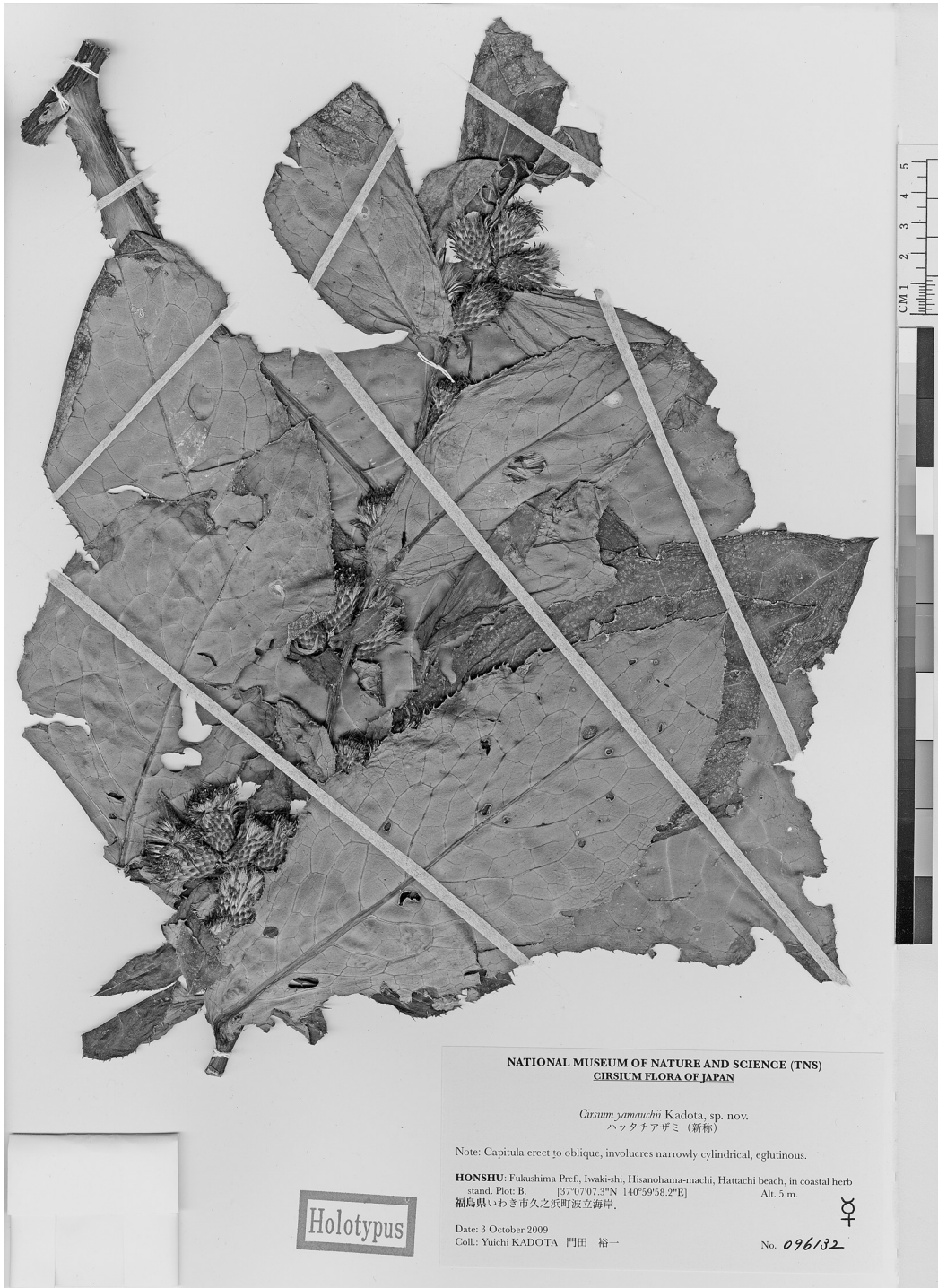


Fig. 8. Type specimen of *Cirsium yamauchii* Kadota (JAPAN: HONSHU; Fukushima Pref., Iwaki-shi, Hisanohama-machi, Hattachi Kaigan, in coastal herb stand, alt. 5 m, 3 Oct. 2009, Y. Kadota 096132, TNS 741839).

side, glaucous on the abaxial side, coriaceous and scabrous, dimly lustrous, ovate to obovate-elliptic in outline, subentire (Fig. 9A) to coarsely incised (Fig. 9B), 20–36 cm long, 8–19 cm wide, provided with weak spines 2–5 mm long, glabrous on the adaxial side, sparingly arachnoid and pubescent with multicellular brownish hairs on the abaxial side, petiolate, not amplexicaul or sometimes semiamplexicaul, not decurrent; if incised, incisions 4–8-paired, triangular-ovate, 2–3.5 cm long, 1–3 cm wide; petioles 0.5–6 cm long, winged. Flowers in September to October. Capitula erect to oblique, superficially nodding

when the stem falls down, 3–4 in a compact corymb; peduncles (0–)2–5 mm long, arachnoid; subtending leaves 2–5, linear to narrowly ovato-lanceolate, 3–5 mm long, provided with weak spines ca. 1 mm long. Involucres narrowly cylindrical, eglutinous, 15–18 mm long, 7–8 mm (*in vivo*) and 1.5–2 cm (*in sicco*) in diameter, sparingly arachnoid. Phyllaries 11–12(–13)-seriate, chartaceous, terminated with weak spines ca. 0.5 mm long; glandular bodies absent; innermost phyllaries narrowly obovato-lanceolate, ca. 15 mm long; outer phyllaries narrowly ovate with strongly recurved caudate tips, 2–3 mm long.

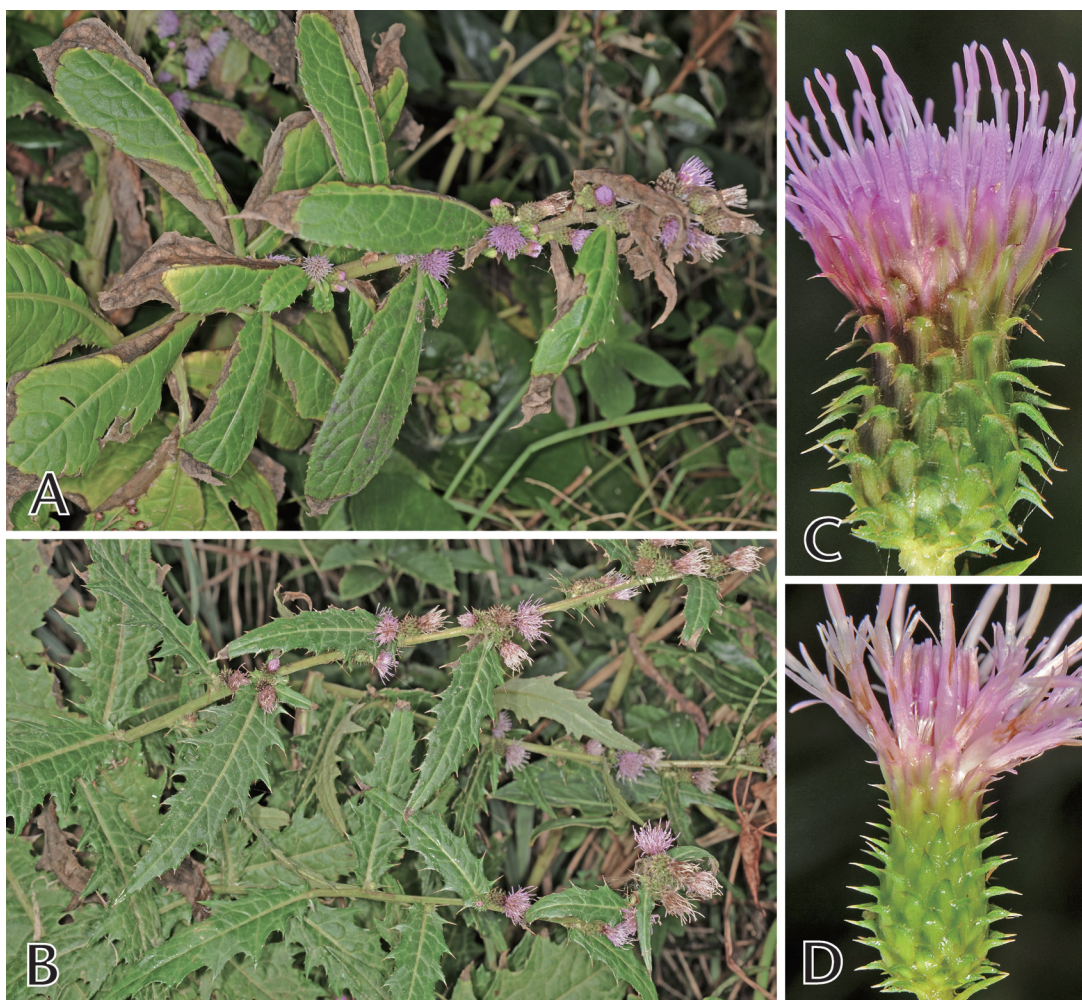


Fig. 9. Habit of *Cirsium yamauchii* Kadota. A. Subentire-leaved plant. B. Coarsely serrate-leaved plant. C. Female head. D. Hermaphrodite head. All photographed at Hattachi Kaigan, Hisanohama-machi, Iwaki-shi, Fukushima Pref., Japan, on 3 Oct. 2009.

Corollae pale violet (Fig. 9D, hermaphrodite plant) to deep pink (Fig. 9C, female plant), 13–16 mm long; lobes 3–4 mm long; throats 4–6 mm long; tubes 6 mm long, slightly longer than or as long as the throats. Achenes ivory white tinged with pale purplish brown, ca. 4 mm long, striate, not ribbed; pappi sordid, 9–13 mm long.

Chromosome number: $2n=2x=34$ (present paper).

Japanese name: Hattachi-azami (nom. nov.)

Distribution: Honshu (Hattachi beach, Iwaki, Fukushima Pref.). Endemic to Japan.

Etymology: The specific epithet “*yamauchii*” is dedicated to Mr. Mikio Yamauchi, Iwaki, Fukushima Pref., who is the discoverer of this new thistle.

Additional specimens examined: JAPAN: HONSHU; **Fukushima Pref.**, Iwaki-shi, Hisanohama-machi, Hattachi Kaigan, in coastal herb stand, 37°07'07.3"N 140°59'58.2"E, alt. 5 m, 3 Oct. 2009, Y. Kadota 096131, 096133–096134*, 096135–096136, 096137–096138* (TNS); Hattachi Kaigan, in coastal herb stand, 37°07'00.3"N 140°59'58.0"E, alt. 7 m, 3 Oct. 2009, Y. Kadota 096111–096112, 096113*, 096114–096118, 096119–096121* (TNS). The collection number attached with an asterisk “*” indicates female plant.

Cirsium yamauchii is a coastal plant and has thick and lustrous leaves adapting to the coastal climate. This thistle grows with *Castanopsis sieboldii*, *Pittosporum tobira*, *Fatsia japonica*, *Elaeagnus macrophylla*, *Farfugium japonicum*, *Miscanthus sinensis*, *Cyrtomium fortunei* etc. The habitats are located close to the sea shore and are easily washed over by waves in stormy weather. Whereas the other species of the subsect. *Tubelosae* occur in inland regions of Honshu and Hokkaido. *Cirsium yamauchii* is characteristic of its habitat preference in this subsection.

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