

## Nomenclature and Typification of Names in *Cerasus* (*Rosaceae*)

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For the revised edition of the “Wild Flowers of Japan” (Heibonsha Ltd., Publishers), several new names are needed for the account of *Cerasus* (*Rosaceae*). Five new combinations, *C. ×chichibuensis* (H. Kubota & Moriya) T. Katsuki & H. Ikeda, *C. ×kubotana* (Kawas.) T. Katsuki & H. Ikeda, *C. ×subhirtella* (Miq.) Masam. & Suzuki f. *hisauchiana* (Koidz. ex Hisauti) T. Katsuki & H. Ikeda; f. *tama-clivorum* (Oohara, Seriz. & Wakab.) T. Katsuki & H. Ikeda; and f. *koshiensis* (Koidz.) T. Katsuki & H. Ikeda, are proposed. *Prunus takasawana* H. Kubota & Funatsu, an invalid name, is proposed as nothovar. *takasawana* T. Katsuki & H. Ikeda under *C. ×oneyamensis* (Hayashi) H. Ohba. Lectotype of *Prunus koshiensis* Koidz. is designated.

**Key words:** *Cerasus*, interspecific hybrid, *Prunus*, *Rosaceae*, typification.

“Wild Flowers of Japan”, published by Heibonsha (Satake et al. 1981, 1982, 1989) is the most popular series of handbooks covering all wild plants in Japan. That work is now being revised. In connection with the revision, six new names are proposed for the account of *Cerasus* (*Rosaceae*).

**1) *Cerasus ×chichibuensis*** (H. Kubota & Moriya) T. Katsuki & H. Ikeda, **comb. nov.**

Basionym: *Prunus chichibuensis* H. Kubota & Moriya [in Bull. Chichibu Mus, Nat. Hist. **10**: 117, f. 1–3 (1960), nom. illeg.] in H. Koyama & Kawas. in Bull. Natl. Sci. Mus., Tokyo, Ser. B, **19**(1): 39 (1993).

[*Cerasus ×chichibuensis* (H. Kubota & Moriya) H. Ohba in J. Jpn. Bot. **67**: 277 (1992),

nom. illeg.; in K. Iwats. & al., Fl. Jap. **IIb**: 141 (2001), nom. illeg.]

**Type: JAPAN.** Honshu, Saitama, Chichibu, Konsenjihara (T. Moriya s.n., 13 Apr. 1958, TNS 146910–holotype, designated by Koyama and Kawasaki 1993).

Other specimen examined: JAPAN. Honshu, Saitama, Chichibu, Konsenjihara (T. Moriya s.n., 3 June 1958, TNS 146909).

Japanese name: Chichibu-zakura チチブザクラ.

Presumption: *Cerasus apetala* (Siebold & Zucc.) Masam. & Suzuki × *C. itosakura* (Siebold) Masam. & Suzuki

Kubota and Moriya (1960) based *Prunus chichibuensis* on a collection from Chichibu, Saitama Prefecture, Japan. They designated

two sheets, one containing a branch with flowers, the other a specimen with leaves, as types. According to ICN Art. 40.2, their name is invalid, because they designated multiple specimens as types (McNeill et al. 2012). The name was validated when Koyama and Kawasaki (1993) designated one of the two specimens as the holotype with correct citation of Kubota and Moriya (1960) (ICN Art. 40.3).

Ohba (1992) treated *Prunus chichibuensis* as a hybrid within the genus *Cerasus*, and made the new combination, *Cerasus ×chichibuensis* (H. Kubota & Moriya) H. Ohba. The combination was invalid, however, because *P. chichibuensis* was not valid at that time. Although Ohba (2001) again cited this name in “Flora of Japan Vol. IIB”, referring to Kubota and Moriya (1960) as a synonym, the combination was still invalid, because he did not cite the full and direct reference of the name validated by Koyama and Kawasaki (1993) (ICN Art. 41.5).

2) *Cerasus ×kubotana* (Kawas.) T. Katsuki & H. Ikeda, **comb. nov.**

Basionym: *Prunus Kubotana* Kawas. [in J. Jap. Bot. **34**: 48, f. 1 & 2 (1959), nom. illeg.] in H. Koyama & Kawas. in Bull. Natl. Sci. Mus., Tokyo, Ser. B, **19**(1): 41 (1993).

[*Cerasus ×kubotana* (Kawas.) H. Ohba in J. Jpn. Bot. **67**: 278 (1992), nom. illeg.; in Iwatsuki & al., Fl. Jap. **IIB**: 141 (2001), nom. illeg.]

**Type:** JAPAN. Honshu, Tochigi, Bot. Nikko. Univ. Tokyo in Hort. (T. Kawasaki s.n., 26 Apr. 1958, TNS 136641–holotype, designated by Koyama and Kawasaki 1993; TNS 136642–isotype).

Other specimens examined: JAPAN. Honshu, Tochigi, Bot. Nikko. Univ. Tokyo in Hort. (T. Kawasaki s.n., 8 June 1958, TNS 136643, TNS 136644).

Japanese name: Takane-ohyama-zakura タカネオオヤマザクラ.

Presumption: *Cerasus nipponica* (Matsum.) Masam. & Suzuki × *C. sargentii* (Rehder) H. Ohba

The nomenclatural history of this taxon is

similar to that of *C. ×chichibuensis*. Kawasaki (1959) named *Prunus kubotana* based on a collection from Nikko Botanical Garden, Tochigi Prefecture, Japan. He designated two sheets (one with flowers and another with leaves) as types. The name was invalid when published, according to ICN Art. 40.2, but was validated by Koyama and Kawasaki (1993) when they designated the holotype specimen. The name under the genus *Cerasus*, *C. ×kubotana* (Kawas.) H. Ohba (1992, 2001), was still invalid according to ICN Art. 41.5.

We located an isotype of *C. ×kubotana* in TNS (TNS 136642), which is a duplicate of the holotype. We also found two additional specimens that were cited in Kawasaki (1959) (TNS 136643, TNS 136644).

3) *Cerasus ×oneyamensis* (Hayashi) H. Ohba nothovar. *takasawana* T. Katsuki & H. Ikeda, **nothovar. nov.**

[*Prunus takasawana* H. Kubota & Funatsu in J. Geobot. **14**: 7 (1965), nom. illeg.]

[*Cerasus ×takasawana* (H. Kubota & Funatsu) H. Ohba in J. Jpn. Bot. **67**: 279 (1992), nom. illeg.]

[*Cerasus ×oneyamensis* (Hayashi) H. Ohba nothovar. *takasawana* (H. Kubota & Funatsu) H. Ohba in J. Jpn. Bot. **73**: 117 (1998), nom. illeg.]

**Type:** JAPAN. Honshu, Niigata, Kitakambara-gun, Mt. Oomine (H. Kubota & K. Funatsu s.n., 9 June 1963, TOCH 149545–holotype).

Other specimens examined: JAPAN. Honshu, Niigata, Kitakambara-gun, Mt. Oomine (H. Kubota & K. Funatsu s.n., 22 Apr. 1963, TOCH 148647); Ibid. (H. Kubota s.n., 8 June 1963, TOCH 150227); Ibid. (H. Kubota s.n., 7 June 1964, TOCH 149825, TOCH 149827); Ibid. (H. Kubota & K. Funatsu s.n., 22 Apr. 1965, TNS 256363); Ibid. (H. Kubota & K. Funatsu s.n., 8 June 1965, TNS 256362); Ibid. (H. Kubota s.n., 12 June 1965, TOCH 148722, TOCH 149547, TOCH 150226).

Japanese name: Oomine-zakura オオミネザクラ.

Presumption: *Cerasus apetala* (Siebold et Zucc.) Masam. & Suzuki var. *pilosa* (Koidz.) H. Ohba × *C. sargentii* (Rehder) H. Ohba

Kubota and Funatsu (1965) named *Prunus* × *takasawana* and cited two specimens collected on Mt. Oomine in Echigo (Niigata Prefecture) in 1963 and deposited in TNS as types, making the name invalid according to ICN Art. 40.2. Since then, the name has not been validated, although Ohba (1992) treated it under *Cerasus* and used the name as the basis for a new combination (Ohba 1998). We propose this taxon as a nothovariety of *C. ×oneyamensis* (Hayashi) H. Ohba.

Although Kubota and Funatsu (1965) indicated that the cited specimens were deposited in TNS, we were unable to find their specimens there, but we did find several specimens of this taxon in TOCH. They were collected at the type locality in 1963. Two specimens were collected by Kubota & Funatsu (TOCH 149545, TOCH 148647) and one specimen by Kubota (TOCH 150227). We select TOCH 149545 (with leaves), a duplicate specimen of one cited by Kubota and Funatsu (1965), as the holotype.

#### 4) Three formae under *Cerasus* × *subhirtella* (Miq.) Masam. & Suzuki

*Prunus subhirtella* was described by Miquel (1865) from specimens confused with *Cerasus incisa* and *C. itosakura* (Koehne 1912). *Cerasus subhirtella* is considered to be a hybrid between *C. incisa* and *C. itosakura* (Ohba 2001), with which we agree.

a) forma *hisauchiana* (Koidz. ex Hisauti) T. Katsuki & H. Ikeda, **stat. et comb. nov.**

Basionym: *Prunus hisauchiana* Koidz. ex Hisauti in J. Jap. Bot. **13**: 550 (1937).

*Cerasus* × *hisauchiana* (Koidz. ex Hisauti) H. Ohba in J. Jpn. Bot. **67**: 278 (1992).

*Prunus incisa* Thunb. var. *tomentosa* Koidz. in Bot. Mag. (Tokyo) **29**: 314 (1915).

**Type: JAPAN.** Tokyo, Mt. Takao (G. Koidzumi s.n., Apr. 1910, TI–holotype). Yokohama. (K. Hisauchi s.n., 13 May 1937, TI–paratype).

Japanese name: Yabu-zakura ヤブザクラ.

Presumption: *Cerasus incisa* Thunb. var. *incisa* × *C. itosakura* (Siebold) Masam. & Suzuki

*Cerasus* × *subhirtella* f. *hisauchiana* was originally published as a variety of *C. incisa* by Koidzumi (1915), and raised to species rank by Hisauchi (1937). Although the type specimen was not clearly indicated by Koidzumi (1915), Hisauchi (1937) cited a specimen collected on Mt. Takao by G. Koidzumi in 1910 (TI) as the type.

Currently, f. *hisauchiana* is considered to be a hybrid between *Cerasus incisa* var. *incisa* and *C. itosakura* (Ohba 2001, Oohara et al. 2004). However, results from an analysis of genetic markers indicated that it is not simply the result of hybridization between *C. incisa* and *C. itosakura*, but is also affected by other species (Kato et al. 2014).

b) forma *tama-clivorum* (Oohara, Seriz. & Wakab.) T. Katsuki & H. Ikeda, **stat. et comb. nov.**

Basionym: *Prunus tama-clivorum* Oohara, Seriz. & Wakab. in J. Jpn. Bot. **79**: 343, f. 1–4 (2004).

*Cerasus tama-clivorum* (Oohara, Seriz. & Wakab.) Yonek. in J. Jpn. Bot. **80**: 324 (2005).

**Type: JAPAN.** Tokyo, Hachioji, Minami-ohsawa, campus of Tokyo Metropolitan University, ca. 130 m alt. (T. Oohara MAK-347646, 1 Apr. 2003, MAK–holotype; AICH, KYO, TI, TYM–isotypes).

Japanese name: Hoshi-zakura (Tama-no-hoshi-zakura) ホシザクラ (タマノホシザクラ).

Presumption: *Cerasus incisa* Thunb. var. *incisa* × *C. itosakura* (Siebold) Masam. & Suzuki

The type locality of *Prunus tama-clivorum* is Hachioji, Tokyo. *Cerasus* × *subhirtella* f. *hisauchiana* is also in the same area. These two are similar in gross morphology, and both are considered to be hybrids between *C. incisa* var. *incisa* and *C. itosakura*. Therefore, we

propose a new combination as a forma under *C. ×subhirtella*, a hybrid between *C. incisa* and *C. itosakura*.

c) forma *koshiensis* (Koidz.) T. Katsuki & H. Ikeda, **stat. et comb. nov.**

Basionym: *Prunus koshiensis* Koidz. in Acta Phytotax. Geobot. **1**: 14 (1932).

*Prunus subhirtella* Miq. var. *koshiensis* (Koidz.) Ohwi in Bull. Natl. Sci. Mus. Tokyo **33**: 76 (1953).

*Prunus pendula* Maxim. var. *koshiensis* (Koidz.) Ohwi in J. Jap. Bot. **29**: 363 (1954).

*Prunus spachiana* (Lavallée ex H. Otto) Kitam. var. *koshiensis* (Koidz.) Kitam. in Acta Phytotax. Geobot. **25**: 3 (1971).

*Cerasus spachiana* Lavalée ex H. Otto var. *koshiensis* (Koidz.) H. Ohba in J. Jpn. Bot. **67**: 279 (1992).

*Cerasus itosakura* (Siebold) Masam. & Suzuki var. *koshiensis* (Koidz.) H. Ohba & H. Ikeda in J. Jpn. Bot. **91**: 184 (2016).

**Lectotype** (designated here): **JAPAN**. Honshu, Yettsiu (Toyama Pref.), Higashi-tonami-gun, Minotani-mura (T. Ota s.n., 13 Apr. 1930, KYO 00081193). *Ibid.* (T. Ota s.n., 25 June 1930, KYO, TI-syntypes).

Japanese name: Koshi-no-higan-zakura コシノヒガンザクラ.

Presumption: *Cerasus incisa* Thunb. var. *kinkiensis* (Koidz.) H. Ohba × *C. itosakura* (Siebold) Masam. & Suzuki

Koidzumi (1932) published *Prunus koshiensis* as a distinct species based on two specimens from Minotani, Yettsiu (Toyama Prefecture) collected by T. Ota in 1930. Those specimens are at KYO and TI, but the name has not been typified. Here we select the specimen with flowers as the lectotype.

Forma *koshiensis* occurs in the wild in Minotani, Nanto city, Toyama Prefecture, and is widely planted in Toyama Prefecture. Although neither Ohba (2001) nor Ohba and Ikeda (2016) treated it as a variety of *Cerasus itosakura*, Kubota (1974) pointed out its possible

hybrid origin. Results based on genetic markers obtained from plants collected in Minotani showed it to be a hybrid between *C. itosakura* and *C. incisa* (Kato unpublished). We therefore propose it to be a forma under *C. ×subhirtella*, a hybrid between *C. incisa* and *C. itosakura*.

These three formae would be distinguished as two nothovarieties, *Cerasus incisa* var. *incisa* × *C. itosakura* and *C. incisa* var. *kinkiensis* × *C. itosakura*. However, parent taxa of *C. ×subhirtella* have not been revealed in variety rank. Therefore, nothovarieties were not shown in here.

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#### 勝木俊雄<sup>a</sup>, 池田 博<sup>b</sup>: サクラ属 (バラ科) の新たな命名とタイプ指定

筆者らは平凡社から発行する予定の『改訂新版 日本の野生植物』のバラ科の解説を担当した。その中のサクラ属 (*Cerasus*) における6分類群の学名は、新しく発表する必要が考えられたので、ここに発表する。チチブザクラ (*C. ×chichibuensis* (H. Kubota & Moriya) T. Katsuki & H. Ikeda), タカネオオヤマザクラ (*C. ×kubotana* (Kawas.) T. Katsuki & H. Ikeda), それにコヒガンザクラ (*C. ×subhirtella*) の品種としてヤブザクラ (f. *hisachiana* (Koidz. ex Hiauti) T. Katsuki & H. Ikeda) とホシザクラ (f. *tama-clivorum* (Oohara, Ser. & Wakab.) T. Katsuki & H. Ikeda), コシノヒガンザクラ (f. *koshiensis* (Koidz.) T.

Katsuki & H. Ikeda) の新組み合わせを発表した。オオミネザクラ (*C. ×oneyamensis* (Hayashi) H. Ohba nothovar. *takasawana* T. Katsuki & H. Ikeda) については、発表時に2標本がタイプに指定されていたので、国際藻類・菌類・植物命名規約40条2項により、この学名は正式に発表されていない。そこで、雑種変種としてあらたに命名をおこなった。また、*Prunus koshiensis* Koidz. のレクタタイプ (選定基準標本) を選定した。

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