Themeda japonica (Willd.) Tanaka (Gramineae), the Correct Combination for Themeda japonica (Gramineae)

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The correct combination for Themeda japonica (Willd.) Tanaka (Gramineae) is Themeda barbata (Desf.) Veldk. Lectotypes for Andropogon ciliatus Thunb. and Anthistiria pilifera Steud. are designated.

Key words: China, Japan, Java, Korea, lectotypes, nomenclature, Taiwan.

Themeda japonica (Willd.) Tanaka (Gramineae; 1925) is a species widespread from China, Taiwan, Japan, and Korea. The combination has been accepted by East Asian agrostologists: e.g., Honda (1930: 348), Ohwi (1965), Zhao (1998: 299), Hsu (2000). Chung (1965) and Lee (1966) called the taxon T. triandra Forssk. var. japonica (Andersson) Makino.

Its history started with Houttuyn (1782) who gave a note under Stipa arguens L. about a curious grass that he had received from Thunberg collected in Japan, which in no way, he noted, could be the same as Linnaeus’s species. He provided a beautiful illustration, but no name. His specimen is in G (Thunberg in Herb. Houttuyn, G0038273).

Thunberg had given his manuscripts on Japanese plants to Murray who pre-empted him by a few months (May–June, against Aug. 1784). The Andropogon ciliatus he described from Nagasaki is to be cited as Thunberg in and not ex Murray.

He had to pay excessively for permits to collect. In a letter to N. L. Burmann, 25 Jan 1777, he wrote: “By special favour of the Japanese Governor I was permitted to make several excursions around Nagasaki. When I say that for a single day, to collect plants with a big crowd of Japanese, I had to pay 16 or 18 “imperiales” (“rijksdaalders”, rix-dollars, Hfl. 2.50), you certainly do not believe me, and when I say that during my stay of 15 months in Japan, I had to pay 1000 imperiales, you will even less believe me” (Van Hall 1830: 263).

Obviously, his type is in his own herbarium (Herb. Thunberg 23927, UPS) and is the most likely candidate for the lectotype: he would of course have kept the “nicest” specimen for himself, the others, at least two known ones, are duplicates, and the base for later descriptions and names. It is also a likely assumption that under the circumstances he would not collect such a distinct species at several times and/or places and that the specimens concerned here, probably torn from the same tuft, represent a single gathering and are duplicates of each other (Art. 8.3 & footnote), i.e., are isotypes (fide Ex. 5, last sentence). It is also an unwritten, but generally accepted custom, that when a certain taxon was
collected by a single person without further data on provenance these are regarded as duplicates. This is a matter of yes or nay, and no proof for or against can be given.

According to the ICB Art. 9.3 (McNeill et al. 2012) on “original material” the specimens in the Houttuyn, Thunberg, and Willdenow herbaria are isotypes of each other. Yet, purists will call them syntypes, and to appease them Thunberg’s UPS specimen is here designated as the lectotype.

Gaertner (1791) accepted Thunberg’s species as an unnamed variety β under Anthistiria ciliata L. f. (1782), and although he gave a diagnosis with differences, he concluded that it was not a distinct species.

In Themeda the species cannot be called T. ciliata, because this combination has been made by Hackel (1889: 664).

Thereby Desfontaines’s Anthistiria barbata (1792) comes into the picture and provides the oldest candidate for a combination in Themeda. This new name was needed because of the earlier Anthistiria ciliata L. f. It was based on Japanese sources only, Andropogon ciliatus, and therefore is typified by the type of that. The description and illustration, however, have to be excluded, as they were based on a collection of possibly T. quadrivalvis (L.) Kuntze in the Herbarium of Thouin from the Île de France (Mauritius), probably collected by Joseph Martin in 1788.

The species was described as Anthistiria japonica by Willdenow (1806) who cited two previous publications: Thunberg’s (1784b) Andropogon ciliatus, and the German translation by Christmann (1785) of Houttuyn’s “Naturlijke Historie” (1782). Again, the earlier combination Anthistiria ciliata L. f. forced him to use a different epithet. His combination is because of Desfontaines’s earlier Anthistiria barbata a superfluous renaming of that of Thunberg and so are all uses of “japonica” at the specific level (Art. 52.1). There is a Thunberg specimen in B-W (Thunberg in Herb. Willdenow 18627). Note that illegitimate names do not generate an author in parentheses (Art. 49.1).

Steudel (1854a, 1854b) described Anthistiria pilifera, based on a mixture of a Japanese collection (Goering II, 145; P) and one from Java (Zollinger 373; G, L, P). Zollinger 373 is occasionally cited in Malesian literature, while Goering II, 145 I have not found mentioned anywhere, thus the Zollinger duplicate in P is designated as the lectotype here.

When looking for vouchers and types for Houttuyn’s, Thunberg’s, Gaertner’s, Desfontaines’s, and Willdenow’s names it turned out that they all go back to a single collection presumably isotypes, made by Thunberg in Japan (UPS) and distributed to e.g., Houttuyn (G) and Willdenow (B-W).

According to the ICB Art. 9.3 (McNeill et al. 2012) on “original material” the specimens in the Houttuyn, Thunberg, and Willdenow herbaria are isotypes of each other. Article 52.1 applies and combinations at the specific level using “japonica” are superfluous for “barbata”.

The first use of “japonica” at the infraspecific level was by Andersson (1856) under Anthistiria arguens (L.) Willd. and subsequent uses of the epithet in new combinations elsewhere are to be attributed to him in parentheses.

Themeda barbata (Desf.) Veldk., comb. nov. [Fig. 1]


Plants perennial. Culms 0.7–1.2 m tall. Ligule collar-shaped, 1–3 mm long. Leaves 25–60 cm by 3–9 mm. Inflorescence 20–50 cm long. Uppermost spatheoles 2.5–3.5 cm long. Peduncle of raceme ca. 1/4 times as long as the spatheoles, glabrous. Involucre dehiscent, involucral spikelets sterile, inserted at the same level, reduced to 2 glumes, 8–10 mm long, lower glume distally white pilose. Fertile spikelets 1. Awn well developed, column twisted, 3.5–6 cm long, hairs brown. Pedicelled spikelets 0 or 2. Chromosome number 2n = 80.

Distribution: China, Japan, Korea. Reports for elsewhere mainly refer to T. arguens (L.) Hack or T. triandra Forssk.

Notes: The correct name of the author of Themeda japonica is to be cited as “Tanaka” whose first name was Tyôzaburô or Chôzaburô, hence the “C. Tanaka” often seen, not to be confused with Ms. Chihiro Tanaka (1999) [not cited in References]. Her name is mentioned by IPNI, but no combinations are attributed to her. Searching on the internet turned out to be impractical as there is a famous athlete with the same name.

Anthistiria pilifera Steud. (1854b) was described on Goering II 145 (P; Japan) and Zollinger 373 (G, L, P; Java, Tjikoya), the P duplicate of the latter is designated here as the lectotype.

Dr. M. hjertson kindly looked up the Thunberg specimen in UPS, and Dr. L. Gautier and Mr. L. Loze the one in G. The library staff of L were, as usual, very diligent in finding literature. The heirs to Mr. Takemasa Osada (1912–2002) kindly gave permission to use his beautiful drawing.

References


J. F. Veldkamp：イネ科メガルカヤの正名，*Themeda barbata* (Desf.) Veldk.


