RHUS SEMIALATA Murr. var. *ROXBURGHII* DC.

The unnamed *Rhus* in the Linnean Herbarium pinned to the type sheet of *Rhus javanica* L.

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ON THE TYPE OF RHUS JAVANICA LINNAEUS

E. D. MERRILL

Plates 10 and 11

Recently in checking certain references in Bennett's *Plantae Javanicae Rariores* I was impressed with a statement appearing on page 200, under *Picrasma javanica* Blume, referring to the specimens representing *Rhus javanica* in the Linnean Herbarium. In discussing *Brucea antidysenterica* and *B. sumatrana* Bennett¹ states: "DeCandolle omits Salisbury's synonym of *Rhus Javanica*, L., for this plant [*Brucea gracilis* (Salisb.) DC.]; which is, however, quite correct so far as regards the specimen in the Linnean Herbarium so marked by Linnaeus himself; but there is also a specimen of a true *Rhus* (*R. Javanica* of authors) pinned on the specimen of *B. Sumatrana* thus misnamed."

Turning to Linnaeus² we find the brief original description of *Rhus javanica* to be as follows:

"*Rhus* foliis pinnatis ovatis acuminatis serratis subtus tomentosis. Habitat in Java. Osbeck."

In the second edition of the *Species Plantarum*³ the description is repeated with the alteration of one word only, the locality "Java" being changed to "China" without comment.

I then communicated with Mr. B. Daydon Jackson, late custodian of the Linnean collections and for the preceding forty-six years Secretary of the Linnean Society, to see if further evidence could be secured regarding the matter under discussion. Mr. Jackson courteously had prepared for me photographs of the two specimens in the Linnean Herbarium (plates X and XI), and regarding these states: The print marked a (= plate X) is of the specimen determined to be *Brucea sumatrana*. The other sheet b (= plate XI) is that pinned, presumably by Linné, to a. Neither sheet bears any data on the back, but sheet a is marked in Linné's handwriting "2. *Rhus javanicum*," while sheet b bears only the figure 2 in the handwriting of Linné to indicate his determination of it as synonymous with the first sheet, the number in both cases, corresponding with the *Species Plantarum*, edition one, where *Rhus javanica* is the second species.

¹ Bennett, J. J., et Brown, R. *Plantae Javanicae rariores*, 200 (1844).

² Linnaeus. *Species Plantarum*, 265 (1753).

³ Linnaeus. *Species Plantarum*, ed. 2, 380 (1762).

A glance at the accompanying plates clearly shows that two totally different species are represented, one marked by Linnaeus himself as *Rhus javanicum*, a *Brucea*, manifestly a form of the common and widely distributed oriental species currently known as *Brucea sumatrana* Roxb., the other *Rhus javanica* as commonly interpreted by numerous authors. Two questions immediately arise. Which is the actual type? Why did Linnaeus change the locality from Java of 1753 to China in 1762? It is to be noted that the original brief description, quoted above, applies equally well to the two very different specimens, the *Brucea* and the *Rhus*, for in both the leaflets are tomentose beneath.

Turning to Osbeck¹ we find that his actual botanizing in Java was confined to a few hours on the afternoon of July 16, 1751, at or near Anjer Point at the west end of the island. He lists nothing in his Dagbok that can possibly represent either *Rhus javanica* or *Brucea sumatrana*, but it is possible that he did not mention all the plants he actually collected. He reached southern China on August 25, 1751, and sailed thence January 4, 1752. His botanical field work in China was very much more extensive than in Java, his actual collecting being done in the immediate vicinity of Whampoa, near Canton, in Kwangtung Province. Now *Brucea sumatrana* Roxb. (*Rhus javanica* Linn., according to the extant specimen so named by Linnaeus himself) is locally common at low altitudes in Java, while *Rhus javanica* as currently interpreted occurs in Java only as an introduced plant and is apparently not common; on the other hand both are very common in thickets throughout the entire region about Canton, southeastern China. It is thus possible that Osbeck collected the *Brucea* in Java, but this is improbable in view of the fact that the extant specimen represents the Chinese, not the Javan form of *Brucea sumatrana* Roxb. It is most improbable that he observed or collected a true *Rhus* in Java. It is hence probable that the use of the specific name *javanica* was a pure error. It should be remembered that Osbeck did not reach Sweden on his return voyage until June 26, 1752, while the *Species Plantarum* was published in 1753. It is clear that the rather numerous references to Osbeck's plants must have been interpolated in the manuscript by Linnaeus, and probably this was rather hurriedly done.

As noted above, among the few plants cited by Osbeck as having been collected in Java, no *Rhus* is mentioned; on the other hand in his Dagbok, page 232 (1757) he cites among the plants collected on September 27, 1751, on Dane's Island (near Whampoa, South-eastern China) "*Rhus chinensis* blommade wid grafwarna, och kallades af Chineserna Monchi" and "*Rhus javanica*, germine rubro, Chin. Taj-scha," the two Chinese local names being translated by Forster as *monkhi* and *tay-sha*. It seems to be evident then that Osbeck had in mind two entirely different plants.

¹ Osbeck, P. Dagbok öfwer en ostindisk Resa. . . . 1-367, pl. 1-12 (1757); Reise nach Ostindien und China . . . 1-552, pl. 1-13 (1765); A voyage to China and the East Indies . . . I. xx, 1-396, pl. 1-13. (1771); II. 1-367 (1771). See also Merrill, E. D. Osbeck's Dagbok öfwer en ostindisk Resa. (in Am. Jour. Bot. iii. 571-588. 1916).

BRUCEA JAVANICA (L.) Merr.

Type of *Rhus javanica* L. in the Linnean Herbarium

Doubtless both plants are those now in the Linnean Herbarium, the *Brucea*, marked by Linnaeus as *Rhus javanica*, and the true *Rhus* which is pinned to the same sheet and unnamed except by inference. What apparently happened is that Linnaeus actually based his short and imperfect description of *Rhus javanica* on the *Brucea*, and later pinned the sheet of *Rhus chinensis* Osbeck to the *Brucea*, altering the locality from "Java" to "China" but without changing the specific name in the second edition of his *Species Plantarum*, and without adding Osbeck's specific name *chinensis* to the specimen; Osbeck, as quoted above, had used the binomial *Rhus chinensis* as a *nomen nudum*, in 1757. This being the case a strict interpretation of types would involve dropping the specific name *javanica* in *Rhus*, adopting this name for the common and widely distributed *Brucea sumatrana* Roxb. and the further adoption of some other specific name for the *Rhus*.

The evidence of the local Chinese name cited by Osbeck for *Rhus javanica*, "taj-scha," is in favor of the assumption that the *Brucea* in the Linnean Herbarium is the actual type of *Rhus javanica* if additional evidence be needed. Loureiro cites for his *Gonus amarissimus* (= *Brucea amarissima* Desv. = *Brucea sumatrana* Roxb.) the Cantonese name *a tam tsao*; on one recent collection from Canton the name *tam shu* appears while several specimens bear the name *a tam* and one *lo ah tam*; *tam shu* manifestly corresponds closely to Osbeck's *taj-scha*. None of the recorded Chinese names *Rhus javanica* auctt. available to me remotely resemble any of these forms, that recorded by Osbeck for his *R. chinensis* being *monchi*. After giving due consideration to all the evidence I am reluctantly forced to the conclusion that the actual type of *Rhus javanica* Linn. is the *Brucea* in the Linnean Herbarium, as named by Linnaeus, and that this name has nothing to do with *Rhus javanica* of recent authors. The following adjustment of synonymy for the species currently known as *Brucea sumatrana* and *Rhus javanica* is proposed.

✓ ***Brucea javanica* (Linn.), comb. nov. (Plate X).**

Rhus javanica Linnaeus, Spec. 265 (1753); ed. 2, 380 (1762); type in herb. Linné.

Gonus amarissimus Loureiro, Fl. Cochinch. 658 (1790).

Brucea sumatrana Roxburgh, Hort. Bengal. 12 (1814), *nomen nudum*; Fl. Ind. ed. 2, i. 449 (1832).—Sprengel, Syst. Veg. i. 441 (1825).

Brucea amarissima Desvaux apud Gomes in Mem. Acad. Sci. Lisb. n. ser. iv. 30 (1872).—Merrill in Philip. Jour. Sci. Bot. x. 18 (1915); Interpret. Herb.

Amboin. 299 (1917); Enum. Philip. Pl. ii. 347 (1923).

Ailanthus gracilis Salisbury, Prodr. 171 (1796).

Brucea gracilis DeCandolle, Prodr. ii. 88 (1824).

Brucea sumatrensis Sprengel, Pl. Pugil. ii. 90 (1815).

Commonly and widely distributed, India to southeastern China through Malaysia and the Philippines to Australia.

***Rhus semialata* Murray in Comm. Soc. Goetting. v. 27, t. 3 (1784). (Plate XI).**

Rhus chinensis Osbeck, Dagbok Ostind. Resa, 232 (1757), *nomen nudum*.

Rhus javanicum Thunberg, Fl. Jap. 121 (1784) et auctt.—Non Linnaeus.
Rhus semialata Murr. var. *Osbeckii* De Candolle, Prodr. II. 67 (1825).
Rhus Osbeckii Decaisne ex Steudel, Nomencl. Bot. ed. 2, II. 452 (1841), synonym.

Widely distributed in China, extending as far north as Korea, very abundant in south-eastern China, introduced in Java, native in Sumatra (*Yates no. 2125*, with wingless petioles), a form or variety in Indo-China, India and Formosa.

This is the unnamed *Rhus* in the Linnean Herbarium pinned to the type sheet of *Rhus javanica* Linn. It is apparently the form considered by Rehder and Wilson as *Rhus javanica* Linn. var. *Roxburghii* (DC.) Rehd. et Wils. in Sargent Pl. Wilson. II. 179 (1914) (*Rhus amela* D. Don) as the leaf rachises are wingless; *Rhus Osbeckii* Decne. (*R. semialata* Murr. ♂ *Osbeckii* DC.) would seem to be identical with *R. javanica* Linn. var. *Roxburghii* Rehd. et Wils. On account of the numerous intergrading forms there is grave doubt as to whether or not a variety should be recognized here, and I prefer to refer these names to *Rhus semialata* Murr. as synonyms.

ENUMERATION OF THE LIGNEOUS PLANTS COLLECTED BY J. F. ROCK ON THE ARNOLD ARBORETUM EXPEDITION TO NORTHWESTERN CHINA AND NORTHEASTERN TIBET

ALFRED REHDER AND ERNEST H. WILSON

IN charge of the Arnold Arboretum expedition to northwestern China and northeastern Tibet Mr. J. F. Rock sailed from San Francisco on September 30, 1924. Originally planned to occupy two years, the expedition, owing to the disturbed political condition in China, occupied until September, 1927. Travelling by the usual route across the Pacific Ocean Mr. Rock disembarked at Shanghai. Later he proceeded to Hongkong and to Haiphong in Tonkin, where he arrived on November 5th. From Haiphong he went by railway to Yunnan-fu, where his caravan was collected and by arrangement the collectors he had employed on a former expedition met him. From there the expedition proceeded overland to Suifu on the Yangtsze River arriving on January 27th after a dangerous and arduous trip. From Suifu Mr. Rock went on to Chentu-fu, the provincial capital of the Szechuan province, and later proceeded northward by the main highway to the Kansu border, reaching the town of Choni early in May, 1925. After the necessary arrangements were completed the exploration of the almost unknown Tebbu country to the south—south-west of Choni—was commenced and continued until late August.

In October Mr. Rock explored the Kokonor region in northeastern Tibet and from there journeying in an easterly direction spent some time examining the Richthofen chain, which was found very bare of vegetation.

Merrill, Elmer D. 1928. "On the Type of *Rhus javanica* Linnaeus." *Journal of the Arnold Arboretum* 9(1), 1-4. <https://doi.org/10.5962/p.249320>.

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