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Salacca zalacca, The Correct Name for the Salak Palm

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In 1823 Blume proposed the name Salakka edulis in his catalogue without description, the name apparently suggested by Reinwardt when they worked in the Bogor Botanical Gardens. Later Reinwardt (1826) gave a fragmentary description of Salacca as a new genus based on his Salacca edulis. In the description Reinwardt also added some observations on the vegetative parts which were apparently based on living plants of the single species that he saw in Java, S. edulis. Reinwardt's description of S. edulis was very brief. A more detailed description was given by Blume in Roehmer & Schultes, Systema Vegetabilium Vol. 7 of 1830 (Farr et al. 1979). Later Blume gave a very full description of this species under the name Zalacca edulis in 1843. Salacca edulis Reinw. was the only species based on Calamus salakka of Willdenow (1799); the latter was based in turn on Calamus zalacca Gaertner (1791). Gaertner described Calamus zalacca from a fruit which was probably collected by Thunberg, as he stated "A CL. Thunberg" in the description. The fruit which Gaertner described and figured can belong to either S. edulis Reinw. or to S. sumatrana Becc. Since Thunberg is known to have visited Java but not Sumatra (Steenis-Kruseman 1950) and only S. edulis Reinw. occurs in Java, we may suppose that Thunberg's fruit described by Gaertner is S. edulis Reinw. This was the first validly published name for a Salacca species after 1753. Therefore the taxon which was described by Reinwardt may be proposed as type species of the genus. This taxon is widely cultivated for its fruits especially in some localities in Java (Mogea 1978), and therefore it is not surprising that 'edulis' was chosen as the specific epithet. However, as the generic name is correctly spelled Salacca and not Zalacca, Salacca zalacca is not a strict tautonym and must thus regrettably be the correct name for this species (c.f. Normanbya normanbyi (W. Hill) L. H. Bailey and Lycopersicon lycopersicum (L.) Karsten). Voss (1895) in Vilmorin's Blumengärtnerei published the combination Zalacca zalacca (Gaertn.) Voss, referring in the generic citation to Reinwardt, and thus incorrectly spelling the generic name. In the absence of a relevant rule concerning whether erroneously spelled tautonyms are or are not correctable, I propose to follow established custom and adopt Voss' existing combination after correction of spelling, rather than put forward a new combination. The salak palm is hence correctly cited as Salacca zalacca (Gaertn.) Voss.

The nomenclature of *S. zalacca* is indicated as follows:

Salacca zalacca (Gaertn.) Voss in Vilmorin's Blumengärtnerei ed. 3. edit. Sieb. & Voss 1: 1152. 1895, "Zalacca zalacca."—Calamus zalacca Gaertn., Fruct. Sem. 2: 267, t. 139 a—

f. 1796; Willd., Sp. Pl. 2: 204. 1799; Poir. in Lamk., Encycl. Méth. Bot. 6: 307. 1804; Spreng., Syst. Veg. 2: 17. 1825; Roxb., Fl. Ind. ed. Carey 3: 773. 1823.—Salacca edulis Reinw., Syll. Pl. Ratisb. 2: 3. 1825; Blume in Roehmer & Schultes, Syst. Veg. 7: ?. 1830 (n.v.); Rumphia 2: 159. 1843, 'Zalacca'; F.T. Hubb. & Rehd. in Bot. Mus. Leafl. 1(1): 9. 1932; Furtado in Gard. Bull. Singapore 12: 384, fig. 1. 1949.—Type: "A Cl. Thunberg" (TUB), fr. presumably from Java.

Zalacca blumeana Mart., Nat. Hist. Palm. 3, 1st ed.: 202, t. 123, t. 159, III. 1838; Kunth, En. Pl. 3: 203. 1841; Mart., Nat. Hist. Palm. 3: 201, t. 123. t. 159, III. 1845; Becc., Malesia 3: 65. 1886; Becc. in Ann. R. Bot. Gardn. Calc. 12, 2: 77. 1918, atlas: pl. 1921.—Type: Blume s.n. (M, holo, sheets 244, 245; L) from Java, staminate plant.

Zalacca edulis (non Reinw.) Wall., Pl. As. Rar. 3: 14, t. 222–223, 224. 1831 is S. wallichiana Mart.

Zalacca blumeana (non Mart.) Ridl., in Trans. Linn. Soc. Bot. 3: 392. 1893 is S. glabrescens Griff.

Zalacca edulis (non Reinw.) Merr., Int. Rumph.: 114. 1917 is S. zalacca var. amboinensis (Becc.) Mogea.

a. var. zalacca

b. var. **amboinensis** (Becc.) Mogea var. *amboinensis* Becc. *in* Ann. R. Bot. Gardn. Calc. 12, 2: 74. 1918, atlas pl. 43. 1921.—Type: C.B. Robinson Pl. Rumph. Amb. 25 (FI, holo; BO; BH; K; L; US) from Moluccas, Ambon, Kusy-kusy Sereh, pistillate flower, fruit, VIII. 1913.

Zalacca edulis (non Reinw.) Merr., Int. Rumph.: 114. 1917. Based on Zalacca Rumphius, Herb. Amb. 5: 113, t. 57 f.2 and C. 1747.

Notes

Confusion in this genus was caused by the dioecious habit; moreover au-

thors often recorded the species uncritically for places where the living specimens in a botanical garden were supposed to originate. In 1831, Wallich described and illustrated a species from Burma, of which he had fruiting material and a staminate plant in the Calcutta gardens, said to be from Sumatra although this species has never been found there again. First he had intended to name it Z. rumphii, inscribing his plates with this name, but withdrew it in the text, placing the species, which we now know as S. wallichiana Mart., incorrectly under Z. edulis, acknowledging Martius for the suggestion. However, a few years later, Martius himself recognized Wallich's specimen as new, describing it under the name Z. wallichiana, in his Historia Naturalis Palmarum 3 (1838). He also described Z. blumeana as a new species, under which he cited S. edulis Reinw. as a synonym. Furtado (1949) suggested that Martius did this to avoid the false impression that all edible fruited species must be S. edulis because of the meaning of the specific epithet. As early as 1843 Blume himself correctly reduced the species named in his honor to S. edulis. A complication developed when just those pages of Martius' work dealing with Salacca, were in 1845 published again with additions (2nd ed.). The additions Martius made were largely taken from an important paper published by Griffith in the Calcutta Journal of Natural History of 1844. Griffith adopted Z. edulis in Wallich's sense (our S. wallichiana Mart.), adding three unnamed varieties; these in my opinion cannot be maintained. Beccari wrote three publications on Salacca, the first in Malesia III in 1886 accounting for his collections from Borneo and Sumatra. The second, with Hooker in the Flora of British India in 1893, deals

chiefly with the Malayan species, and the third is a full monograph in Annals of the Royal Botanic Garden Calcutta, the text in 1918 followed by the plates in 1921. A plant from Sumatra was included by him in Z. edulis in 1886, but described as a new species Z. sumatrana in 1918. He also reinstated Z. blumeana (which Blume had correctly reduced to Z. edulis), adding some materials and referring one of Martius' figures to Z. edulis but did not greatly alter the concept of this species. In 1893 Ridley recorded Z. blumeana from Malava, but Furtado (1949) rightly referred it to S. glabrescens Griff. From Ambon no data had been received since Rumphius, to whose work so many authors had referred, until C. B. Robinson made a collection of the Salacca plant there. Merrill, on Beccari's advice, placed it in his interpretation of 1917 under Z. edulis, but Beccari, in his monograph of 1918, described it as Z. edulis var. amboinensis Beccari. This did not, however, end the confusion about Salacca zalacca. We remember that in 1886 Beccari had placed Sumatran material under his Javanese species. In 1918 he took the former and described it as a new species Z. sumatrana Beccari; under Z. edulis he described new Sumatran material as var. riowensis of which the identity remains doubtful, but is close to S. sumatrana. Beccari also described under Z. blumeana (i.e. S. zalacca) a var. rimbo from Sumatra, which has now been reduced to S. sumatrana. Under his Z. edulis, Beccari expressed uncertainty about the identity and distribution of the species. Indeed. Beccari did not have the advantage of a clear starting point, which

gave priority to Gaertner's fruit, nor can he originally have had a clear notion of the type method which indicates Thunberg's fruit from Java as the type of S. edulis, a synonym of S. zalacca. Our work has revealed that S. zalacca is the only species in Java. and was only recently collected in North Sumatra. Salacca zalacca is wild in Southwest Java and South Sumatra. This species is widely cultivated in Java, Madura and Bali. Within its area, there are differences between the genuine Javanese form and another variety from Bali. The one from Bali is the same as that from Ambon, i.e. Salacca zalacca var. amboinensis.

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LITERATURE CITED

FARR, E. R., J. A. LEUSSINK, AND F. A. STA-FLEU. 1979. Index Nominum Genericorum 3: 1546.

MOGEA, J. P. 1978. Pollination in Salacca edulis. Principes 22(2): 56–63.

STEENIS-KRUSEMAN, M. J. VAN. 1950. Cyclopaedia of collectors. Fl. Males. I. (1): 527-528.