***Acacia koa*** A.Gray *U.S. Expl. Exped., Phan.* 15:480 (1854)

**Name Status:** Accepted Name

**Infra-generic Classification:** Section Plurinerves

**Type Citation:** "Hab. Sandwich Islands, Oahu, on the mountains behind Honolulu, Hawaii on the side of the Mouna Loa and Mouna Kea."

**Type Designation:** Lectotype (designated by St. John 1979, publ. 1980: 358): Sandwich [=Hawaiian] Islands, Oahu, on the mountains behing Honolulu, U.S. Exploring Expedition, Wilkes (K); isotypes: A, GH, US **Source:** St. John (1979, publ. 1980: 358)

**Notes:** Acacia heterophylla and A. koa (from the Hawaiian islands in the Pacific Ocean) are morphologically very similar (e.g. Vassal, 1969), despite being separated by a distance of c. 18 000 km. While various authors have treated these two as separate species (e.g. Pedley 1975, Brown et al. 2012) others have considered them better regarded as a single species (e.g. Bentham 1875, Le Roux et al. 2014). These two island endemic, polyploid species are closely related to the Australian endemic, diploid species A. melanoxylon R.Br. (e.g. Brown et al. 2012). Le Roux et al. (2014) demonstrated that A. heterophylla and A. koa did not arise as a result of two independent long distance dispersal events from Australia, as suggested by Brown et al. (2012). Instead, Le Roux et al. (2014) present genetic evidence that A. heterophylla appears to have reached colonised the Mascarene archipelago from an extreme, long-distance dispersal event from Hawaii, c. <1.4m years ago. Despite the genetic evidence to the contrary that is presented by Le Roux et al. (2014), A. heterophylla and A. koa are here treated as separate species until such time as the morphological evidence is reviewed. It should be noted that while A. heterophylla is the earlier name, A. koa is the better-known and economically more important species; therefore, in the event of the two species being formally combined, it would be desirable that a formal proposal be made to conserve A. koa. WorldWideWattle follows Wagner et al. (1990) and Adamski et al. (2012) in regarding A. koa as broadly defined in which three entities are recognized; these authors considered the three entities might best be regarded as three subspecies. In the case of Wagner et al. (1990) the subordinate entities correspond to A. koa sens. str. (widespread throughout the Hawaiian archipelago), A. koaia (from Moloka’I, Lana’I, Maui and Hawai’I Islands) and A. kauaiensis (endemic to Kauai Island). Adamski et al. (2021) recognized the widespread A. koa sens. str. (syn. A. kauaiensis), A. koaia and an informal intermediate entity from Kauai that combines characters of both these species. Although other workers such as Pedley (1975), St. John (1979, publ. 1980), and more, have examined the complex patterns of variation within A. koa sens. lat., the study by Adamski et al. (2012) is the most comprehensive.

**Distribution:** INDIAN SUBCONTINENT [C]: India (West Bengal). PACIFIC OCEAN [N]: Hawaiian Islands

**Synonymy**

- *Acacia koa* var. *koa* A.Gray (1919)

- *Racosperma koa* (A.Gray) Pedley (1986)

- *Acacia heterophylla* var. *latifolia* Benth. (1842)

 - *Acacia koa* var. *latifolia* (Benth.) H.St.John (1979, publ. 1980)

- *Acacia koaia* Hillebr. (1888)

- *Acacia koa* var. *B [beta]* Hillebr. (1888)

 - *Acacia koa* var. *lanaiensis* Rock (1919)

- *Acacia kauaiensis* Hillebr. (1888)

 - *Racosperma kauaiense* (Hillebr.) Pedley (1986)

- *Acacia koa* var. *hawaiiensis* Rock (1919)

- *Acacia koa* var. *weimeae* Hochr. (1925)

- *Acacia koa* var. *waianaeensis* H.St.John (1979, publ. 1980)

- *Acacia heterophylla* sens. Hook. & Arn. (1832)

- *Acacia coa* Walp. (1858)

***Acacia koa* var. *koa*** A.Gray *Bot. Bull. Div. Forest. Board Commiss. Agric. Forest. Hawaii* 5:21-23 (1919)

**Name Status:** Non-Current Name

**Name Type** Autonym Source. WorldWideWattle

**Accepted Name:** *Acacia koa*  A.Gray

**Notes:** Autonym established by publication of Acacia koa var. hawaiiensis & var. lanaiensis Rock 1919.

***Racosperma koa*** (A.Gray) Pedley *Bot. J. Linn. Soc.* 92:248 (1986)

**Name Status:** Non-Current Name

**Name Type** Homotypic synonym Source. WorldWideWattle

**Accepted Name:** *Acacia koa* A.Gray

**Based On:** *Acacia koa* A.Gray

***Acacia heterophylla* var. *latifolia*** Benth. *London J. Bot.* 1:369 (1842)

**Name Status:** Non-Current Name

**Name Type** Heterotypic synonym Source. Pedley (1975: 7); Wagner et al. (1990: 641)

**Accepted Name:** *Acacia koa*  A.Gray

**Infra-generic Classification:** Section Plurinerves

**Type Citation:** "Owhyee, on Mount Kaah, Macrae"

**Type Designation:** Holotype: Hawaiian Islands, Owhyhee (=Hawaii) Island, on Mount Kaah (=Mauna Kea), June 1825, J. Mcrae (BM, K). Note: St. John (1979: 363) gives holotype as at BM, but Pedley (1975: 7) gives it as at K (that notwithstanding, the two specimens would better be regarded as syntypes). **Source:** St. John (1979, publ. 1980: 363)

**Notes:** Pedley (1975: 7) gives holotype as being at herb. K.

***Acacia koa* var. *latifolia*** (Benth.) H.St.John *Pacific Sci.* 33(4):363 (1979, publ. 1980)

**Name Status:** Non-Current Name

**Name Type** Homotypic synonym Source. WorldWideWattle

**Accepted Name:** *Acacia koa*  A.Gray

**Infra-generic Classification:** Section Plurinerves

**Based On:** *Acacia heterophylla* var. *latifolia* Benth.

***Acacia koaia*** Hillebr. *Fl. Hawaiian Isl.* :113 (1888)

**Name Status:** Non-Current Name

**Name Type** Heterotypic synonym Source. Wagner et al. (1990), Adamski et al. (2012)

**Accepted Name:** *Acacia koa* A.Gray

**Infra-generic Classification:** Section Plurinerves

**Type Designation:** Lectotype (designated by St. John 1979, publ. 1980: 365): Hawaiian Islands, Molokai Island, Kalae, July 1870, W. Hillebrand (B, type destroyed but see photo of type taken at B in 1935, namely, Figure 6 in St. John 1979, publ. 1980: 365) **Source:** St. John (1979, publ. 1980: 364)

**Notes:** Regarded as a distinct species by St. John (1979, publ. 1980: 364) but treated as conspecific with (a broadly circumscribed) A. koa by Pedley (1975: 7) and Wagner et al. (1990: 641).

***Acacia koa* var. *B [beta]*** Hillebr. *Fl. Hawaiian Isl.* :113 (1888)

**Name Status:** Non-Current Name

**Name Type** Heterotypic synonym Source. Pedley (1975: 7)

**Accepted Name:** *Acacia koa*  A.Gray

**Infra-generic Classification:** Section Plurinerves

**Type Designation:** Isotype: Without definite locality, ex herb. Hillebrand (BISH) **Source:** Pedley (1975: 7)

***Acacia koa* var. *lanaiensis*** Rock *Bot. Bull. Div. Forest. Board Commiss. Agric. Forest. Hawaii* 5:21 (1919)

**Name Status:** Non-Current Name

**Name Type** Homotypic synonym Source. Pedley (1975: 7); Wagner et al. (1990: 641)

**Accepted Name:** *Acacia koa*  A.Gray

**Infra-generic Classification:** Section Plurinerves

**Based On:** *Acacia koa* var. *B [beta]* Hillebr.

***Acacia kauaiensis*** Hillebr. *Fl. Hawaiian Isl.* :113 (1888)

**Name Status:** Non-Current Name

**Name Type** Heterotypic synonym

**Accepted Name:** *Acacia koa* A.Gray

**Infra-generic Classification:** Section Plurinerves

**Type Citation:** Kauai, Kn[udsen] 55 (B)

**Type Designation:** Neotype (designated by St. John 1979, publ. 1980: 358): Waimea Drainage, 1917, C.N. Forbes 817.K (BISH)

**Notes:** Holotype destroyed according to St. John (1979, publ. 1980: 358). Pedley (1975: 9) and St. John (1979, publ. 1980: 358) recognize this species but it is treated as conspecific with (a broadly circumscribed) A. koa by Wagner et al. (1990: 641).

***Racosperma kauaiense*** (Hillebr.) Pedley *Bot. J. Linn. Soc.* 92:248 (1986)

**Name Status:** Non-Current Name

**Name Type** Homotypic synonym Source. WorldWideWattle

**Accepted Name:** *Acacia koa* A.Gray

**Based On:** *Acacia kauaiensis* Hillebr.

***Acacia koa* var. *hawaiiensis*** Rock *Bot. Bull. Div. Forest. Board Commiss. Agric. Forest. Hawaii* 5:23 (1919)

**Name Status:** Non-Current Name

**Name Type** Heterotypic synonym Source. Pedley (1975: 7); Wagner et al. (1990: 641)

**Accepted Name:** *Acacia koa*  A.Gray

**Infra-generic Classification:** Section Plurinerves

**Type Designation:** Holotype: Pulehua plains and forests, South Kona, 10 Jan. 1919, Rock 12866 (BISH). [Note. St. John (1979, publ. 1980: 363) cites this type as: Rock & Copeland 12566.] **Source:** Pedley (1975: 7)

**Notes:** St. John (1979, publ. 1980: 363) cites Rock & Copeland 12566 as isotype of var. hawaiiensis!.

***Acacia koa* var. *weimeae*** Hochr. *Candollea* 2:377 (1925)

**Name Status:** Non-Current Name

**Name Type** Heterotypic synonym Source. Pedley (1975: 7); Wagner et al. (1990: 641)

**Accepted Name:** *Acacia koa*  A.Gray

**Infra-generic Classification:** Section Plurinerves

**Type Designation:** Holotype: Kauai, Weimea, Feb. 1905, Hochreutiner 3612 (G) **Source:** Pedley (1975: 7)

***Acacia koa* var. *waianaeensis*** H.St.John *Pacific Sci.* 33(4):363 (1979, publ. 1980)

**Name Status:** Non-Current Name

**Name Type** Heterotypic synonym Source. Wagner et al. (1990: 641)

**Accepted Name:** *Acacia koa*  A.Gray

**Infra-generic Classification:** Section Plurinerves

**Type Citation:** "Holotypus: Hawaiian Islands, Oahu Island, Waianae Mts., Dupont Trail, 2,800 ft alt., 30 December 1952, Alvin K. Chock 813 (BISH)"

***Acacia heterophylla*** sens. Hook. & Arn. *Bot. Beechey Voy.* :81 (1832)

**Name Status:** Non-Current Name

**Name Type** Misapplied name Source. Plants of the World Online

**Accepted Name:** *Acacia koa* A.Gray

***Acacia coa*** Walp. *Ann. Bot. Syst.* 4:626 (1858)

**Name Status:** Non-Current Name

**Name Type** Orthographic variant Source. WorldWideWattle

**Accepted Name:** *Acacia koa* A.Gray

**Notes:** Walpers attributes the name to A.Gray, "correcting" the spelling to "coa" and giving "koa" as the indigenous name, however Gray spelt the name koa and that spelling should stand.