Table S1. The 91 species of Schisandraceae currently accepted, with their geographic ranges, flower color, and pollination observations

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| --- | --- | --- |
| ***Species*** | **Geographic range** | **Flower morphology; pollen vectors and references** |
| ***Illicium* 48 named species and 1 unnamed (possibly new) species;** **15 with investigated pollen vectors** |  |  |
| *Illicium angustisepalum* A.C. Smith | Anhui, Fujian, Guangdong, China | Tepals white or pale yellowish, elliptic to elliptic-oblong |
| *Illicium anisatum* L. | Japan | Tepals white. Various insects, mainly flies and beetles (Takahashi, 2006b)  |
| *Illicium arborescens* Hayata | Taiwan, China | Tepals red to pale red, obovate-oblong, papery to fleshy. Flowers with midge eggs and larvae in flowers (seen by SXL on photos taken by S-M. Chaw in Taipei, 20 Aug. 2007) |
| *Illicium brevistylum* A.C. Smith | Guangdong, Guangxi, S Hunan, Yunnan, China | Tepals pale red, suborbicular, papery (outer) to fleshy (inner) |
| *Illicium burmanicum* E. H. Wilson | Yunnan, China; Myanmar | Tepals white |
| *Illicium cambodianum* Hance | Southern Indo-China, S. Myanmar | Tepal color unknown |
| *Illicium cauliflorum* Merr. | Sarawak, Borneo | Tepal color unknown |
| *Illicium cubense* A.C. Smith | Cuba | Tepals white |
| *Illicium difengpi* B. N. Chang | Guangxi, China | Tepals purplish-red to red |
| *Illicium dunnianum* Tutcher | Fujian, Guangdong, Guangxi, Guizhou, Hunan, China | Flower thermogenic, cecidomyiid pollinated, but midge genus not correctly identified (Luo et al. 2010\*); ***Resseliella*,** this study: Fig. 3A, B, C |
| *Illicium ekmanii* A.C. Smith | Dominican Republic & Haiti | Tepals yellow |
| *Illicium floridanum* J. Ellis | Southwest North America; studied in Louisiana, USA | Tepals red.Long list of visitors, cecidomyiids frequent, but no proof of pollen transport by any insect; flowers thermogenic (Thien et al. 1983, 2009) |
| *Illicium griffithii* J. D. Hooker & Thomson | S Xizang, China; Bhutan; NE India | Tepals white oblong-obovate (inner), papery to thinly leathery (outer) to fleshy (inner) |
| *Illicium* *guajaibonense* (Imkhanitskaya) Judd & Abbott | Cuba | Tepals purple |
| *Illicium henryi* Diels | Central to West China | Tepals red. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Illicium hottense* Guerrero, Judd & Morris | Haiti | Tepals yellow |
| *Illicium jiadifengpi* B. N. Chang | Southwest China | Tepeals white. ***Eusphalerum*:** this study: Fig. 3B |
| *Illicium kinabaluense* A.C. Smith | Borneo | Tepal color unknown |
| *Illicium lanceolatum* A. C. Smith | Central to East China | Tepals red. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Illicium leiophyllum A.C. Smith* | Hong Kong, China | Tepals suborbicular-triangular, papery with membranous margin (outer) to fleshy (inner) |
| *Illicium macranthum* A. C. Smith | S Yunnan, China | Tepals white. ***Eusphalerum*:** plant and beetle not sequenced |
| *Illicium majus* Hook. f. & Thomson | Probably West China, India! | Tepals red. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Illicium manipurense* Watte ex King | Northern Myanmar and adjacent Assam | Tepal color unknown |
| *Illicium merrillianum* A.C. Smith | W Yunnan, China; Myanmar | Tepals cherry red |
| *Illicium mexicanum* A.C. Smith | Mexico | Tepals red |
| *Illicium micranthum* Dunn | Southwest China | Tepals red.***Resseliella*:** this study: Fig. 3A, B, C |
| *Illicium modestum* A.C. Smith | S Yunnan, China | Tepals greenish yellow, elliptic to oblong-elliptic, papery |
| *Illicium myanmarnicum* E.H. Wilson | W Yunnan, China; Myanmar | Tepals white or purple, elliptic to oblong-elliptic to oblong-obovate |
| *Illicium oligandrum* Merrill & Chun | Guangxi, Hainan, China | Tepals greenish yellow to pale yellow; ***Resseliella*:** this study: Fig. 3B & C |
| *Illicium pachyphyllum* A.C. Smith | S Guangxi, China | Tepals pink, purplish red, or white, obovate to oblong |
| *Illicium parvifolium* Merr.  | Florida, USA; studied in Alexander Springs, FL | Tepals red, mainly Cecidomyiidae, but no record of pollen transfer (White & Thien 1985)  |
| *Illicium peninsulare* A.C. Smith | Malay Peninsula | Tepal color unknown |
| *Illicium petelotii* A.C. Smith | S. China; N Vietnam | Tepals red. ***Resseliella*:** this study (19-20 April 2015; Tables S2 & S4), but plant and midge sequences both poor |
| *Illicium philippinense* Merrill | Taiwan, China; Philippines | Tepals white, elliptic to obovate-oblong |
| *Illicium ridleyanum* A.C. Smith | Malay Peninsula | Tepals red |
| *Illicium simonsii* Maximowicz (incl. *I. fargesii* fide Flora of China) | Guizhou, Sichuan, Yunnan, China; India; Myanmar | Tepeals white. ***Eusphalerum*:** this study: Fig. 3B |
| *Illicium sp.* Cui 184 | Guangdong, China | Tepals red. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Illicium spathulatum* Y. C. Wu, perhaps a synomym of *I. majus* | Southwest China | Tepals red |
| *Illicium stapfii* Merr. | Borneo | Tepal color unknown |
| *Illicium sumatranum* A.C. Smith | Sumatra | Tepal color unknown |
| *Illicium tashiroi* Maximowicz | Taiwan, China; Japan (Ryukyu Islands) | Tepals white, narrowly oblong |
| *Illicium tenuifolium* (Ridley) A.C. Smith | Malay Peninsula | Tepal color unknown |
| *Illicium ternstroemioides* A.C. Smith | Fujian, Hainan, China | Tepals red, papery to slightly fleshy |
| *Illicium tsaii* A.C. Smith | SE Yunnan, China | Tepals white, oblong  |
| *Illicium tsangii* A. C. Smith | Guangdong, China | Flower thermogenic, cecidomyiid pollinated, but midge genus not correctly identified (Luo et al. 2010\*); ***Resseliella***: Fig. 3B (midge sequencing failed) |
| *Illicium verum* J. D. Hooker | Guangxi, China | Tepals red, yellow-white. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Illicium wardii* A.C. Smith | NW Yunnan, China; Myanmar | Tepals pale yellow, white, or sometimes pinkish, |
| ***Kadsura,* 15-20 species, 4 with investigated pollen vectors** |   |   |
| *Kadsura acsmithii* R.M.K. Saunders | Borneo (Sarawak and Kalimantan) | Outer tepals pale (yellowish) green, tinged red, innermost pink to deep red |
| *Kadsura angustifolia* A.C. Smith | Guangxi, China; Vietnam | Tepals, whitish |
| *Kadsura borneensis* A.C. Smith | Borneo | Tepals yellow |
| *Kadsura celebica* A.C. Smith | Indonesia, Tomohon, Minahassa | Tepal color unknown |
| *Kadsura coccinea* (Lem.) A.C. Smith | Central SW China; Myamar; Vietnam | ***Resseliella:*** Luo et al., 2017 and this study: Fig. 3A, B, C |
| *Kadsura heteroclita* (Roxb.) Craib | Fujian, Guangdong, Guangxi and Guizhou in China | ***Resseliella:*** Luo et al., 2017 and this study: Fig. 3A, B, C |
| *Kadsura induta* A.C. Smith | W Guangxi, SE Yunnan | Tepal color unknown |
| *Kadsura japonica* (L.) Dunal | Taiwan, China; Japan, Korea | Tepals yellow; nectary on the adaxial surface of the inner tepals (Saunders 1998) |
| *Kadsura lanceolata* King | Malay Peninsula, Sumatra, Borneo, Sulawesi, Moluccas | Outer tepals pink to dark red, inner tepals cream to bright yellow; inner tepals cream to bright yellow |
| *Kadsura longipedunculata* Finet & Gagnepain | East to West China | Pollen-feeding *Megommata* (Yuan et al., 2008), midge later re-identified as *Resseliella kadsurae* (Yukawa et al., 2011; ovipositing, not pollen-feeding ***Resseliella*:** Luo et al., 2017 and this study: Fig. 3A, B, C |
| *Kadsura marmorata* A.C. Smith | Borneo (Sabah and Sarawak), Philippines (Mindanao and palawan) | Tepals yellowish, outermost tepals sometimes greenish |
| *Kadsura oblongifolia* Merrill | Guangdong, Guangxi, Hainan in China | ***Resseliella*:** Luo et al., 2017 and this study: Fig. 3A, B, C |
| *Kadsura philippinensis* Elmer | Luzon, Mindanao, Philippines | Tepals White or dull yellow |
| *Kadsura renchangiana* S.F. Lan | NE Guangxi, Guizhou, China | Tepals yellow |
| *Kadsura scandens* Blume | Malay Peninsula, Sumatra, Java, Bali | Tepals white, pale yellow, or red, outer tepals occ. pale green, tinged red |
| *Kadsura verrucosa* (Gagne.) A.C. Smith | Indochina, Malay Peninsula, Sumatra, Java | Tepals yellow, cream, or pink |
| ***Schisandra,* 27 named species,** **2 unnamed (possibly new) species, 4 species that prob. belong in *Kadsura*;** **8 with investigated pollen vectors** |   |   |
| *Schisandra arisanensis* Hayata | Eastern, Western, Central China | Tepals pale yellow, yellow, orange, or red, |
| *Schisandra bicolor* Cheng | Eastern and Central China | Tepals red to greenish. Pollinated exclusively by ***Resseliella*** (Fang et al., 2011) |
| *Schisandra chinensis* (Turczaninow) Baillon | NE China; N Japan; Korea; Russia (Far East) | Tepals white to yellow; flies (cecidomyiids?), thrips, no proof of pollen transport (Takahashi, 2004) |
| *Schisandra elongata* (Blume) Baillon | Endemic to Java | Tepals yellow (outermost greenish) |
| *Schisandra glabra* Rehder | Southern North America | Flies and beetles; flowers thermogenic (Liu et al., 2006) |
| *Schisandra glaucescens* Diels. | Chongqing, W Hubei, China | Tepals white to yellow |
| *Schisandra grandiflora* (Wallich) Hooker & Thomson | Xizang, China; Bhutan; N India; Nepal | Tepals white, cream-white, or sometimes pink-tinged |
| *Schisandra henryi C. B. Clarke* | Central to West China | Pollen-feeding *Megommata* (Yuan et al., 2007), midge later re-identified as *Resseliella kadsurae* (Yukawa et al., 2011; ovipositing, not pollen-feeding ***Resseliella*:** this study: Fig. 3A, B, C |
| *Schisandra incarnata* Stapf. | SW and W Hubei, China | Tepals flesh-pink to deep, flesh-pink |
| *Schisandra lancifolia* (Rehder & E. H. Wilson) A.C. Smith | SC Sichuan, NW W Yunnan, China | Tepals white, yellow, orange, red, or pink |
| *Schisandra longipes* (Merrill & Chun) R.M.K. Saunders | N Guangdong, N Guangxi, China | Tepals pale yellow |
| *Schisandra micrantha* A. C. Smith | Yunnan, China; N India; Myanmar | Tepals yellow and sometimes tinged pink or orange |
| *Schisandra neglecta* A.C. Smith | Yunnan, China; Bhutan; NE India; Myanmar; Nepal | Tepals white, yellow, orange, or pink |
| *Schisandra perulata* Gagnepain | N. Vietnam; N. Thailand | Tepals yellow or red |
| *Schisandra macrocarpa Q. Lin & Y. M. Shui* (morphologically close to *S. plena*) | Endemic to Southerast Yunnan, Southwest China | Tepals greenish, yellowish or yellow red, nearly spherical |
| *Schisandra parapropinqua Q. Lin & Y. M. Shui* (morphologically close to *S. plena*) | Endemic to Guizhou and Yunnan, Southwest China | Tepals yellowish green, innermost ones pink at adaxial side red, spherical |
| *Schisandra plena A.C. Smith* (DNA indicates this is a *Kadsura*) | S and SW Yunnan, China; NE India | Tepals white to pale yellow but red at base |
| *Schisandra propinqua* (Wallich) Baillon (DNA indicates this is a *Kadsura*) | W China; N India; Indonesia; E Myanmar; Nepal; Thailand | Tepals cream, yellow, orange, pink, or purplish |
| *Schisandra pubescens* Hemsley & E.H. Wilson | Chongqing, W Hubei, Sichuan, China | Tepals yellow, orange, or red |
| *Schisandra pubinervis* (Rehder & E. H. Wilson) R. M. K.Saunders, | Hubei, Sichuan, China | Tepals yellow |
| *Schisandra repanda* (Siebold & Zucc.) Radlk. | Japan | Tepals red to greenish. Cecidomyiid (Takahashi, 2006a); ***Resseliella*** (Fang et al., 2011); ***Resseliella*** (Tsujita and Miyake, 2015) |
| *Schisandra rubriflora* Rehder & E. H. Wilson | Sichuan and Yunnan, China; India; Myanmar | ***Resseliella*:** this study: Fig. 3A, B, C |
| *Schisandra sp.*\_Luo 761 | Yunnan China | Tepals yellow. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Schisandra sp.*\_Wang 193 | Hunnan in China | Tepals yellow. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Schisandra sphaerandra* Stapf | Sichuan and Yunnan, China | Tepals red. ***Resseliella*:** this study: Fig. 3A, B, C |
| *Schisandra sphenanthera* Rehder & E. H. Wilson | Most of China except in the NE | Pollen-feeding *Resseliella* and thrips (Du et al. 2012); ***Resseliella*:** this study: Fig. 3A, B, C |
| *Schisandra tomentella* A.C. Smith | S Sichuan, China | Tepals yellow |
| *Schisandra viridis* A. C. Smith | East and Central China | Tepals yellow |

\* In 2009, we collected midges on nursing-stage and dropped flowers of *I. dunnianum* and *I. tsangii* and these samples contained larvae of *Clinodiplosis*, but no adults; we therefore used the name *Clinodiplosis* in our 2010 paper. In 2015, we collected midges from *Kadsura coccinea*, this time taking extra care to include both larvae and adults from inside the flowers or just ovipositing. The 2015 samples contained only females and larvae that belonged to *Resseliella.*

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