

壳斗科植物摘录 (IV)

黄成就

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NOTE ON FAGACEAE (IV)

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关键词 壳斗科; 锥属; 栎属

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壳斗科 FAGACEAE

锥属 *Castanopsis* Spach

圆芽锥 (新种)

乔木, 高达25米, 芽近圆球形, 芽鳞阔卵形, 被早脱落的棕色微柔毛, 顶部边缘有红褐色蜡鳞, 小枝干后黑褐色, 密布微凸起的皮孔。叶近革质, 卵状椭圆形或披针形, 长10—15厘米, 宽3.5—5厘米, 顶部渐尖或尾状尖, 基部一侧略短且偏斜, 宽楔形或急尖, 边全缘或近顶部边缘有1—3小裂齿, 中脉在叶面凸起, 侧脉每边9—12条, 网状支脉纤细, 新生嫩叶背面沿叶脉被疏长柔毛及散布暗灰色蜡鳞; 叶柄长8—10毫米, 幼嫩时被疏长柔毛及蜡鳞。雄花序为圆锥花序, 花序轴被疏长毛及星芒状蜡鳞, 花3—4朵一簇; 雌花有花柱3枚, 长稀达1毫米。果序长5—7厘米, 果集生于果序的上段; 壳斗圆球形, 壳壁厚3—5毫米, 刺长10—15毫米, 在基部合生成刺束, 壳壁为密刺完全遮蔽, 壳斗连刺宽60—80毫米, 成熟时规则地开裂为4瓣; 每壳斗有1坚果, 坚果宽圆锥形, 径20—35毫米, 被伏贴短毛, 果脐位于坚果的底部。

云南: 屏边县, 冯国楣5144 (模式); 同地, 毛品—2824。

Castanopsis globigemmata Chun et Huang, sp. nov.

Species gemmis globosis, perulis margine rufo-lepidotis, cupulae spinis glabris valde peculiaris, C. kawakamii Hayata proximis, quae ramulis juvenalibus petiolis et foliis glabris, illis crassioribus, margine integris raro crenulato-denticulatis, involucris maioribus distat.

Arbor ad 25 m alta; gemmae subsphaericae, squamis late ovalis, brunneo pilosulis mox glabratis, apice marginem secus rubro-lepidotis, ramulis in sicco nigrescente-brunneis, lenticellis prominentibus numerosis dispersis. Folia

subcoreacea, ovato-elliptica vel lanceolata, 10-15 cm longa, 3.5-5 cm lata, apice acuminatissima vel caudata, basi una latere brevior et obliqua, late cuneata vel acuta, margine integra vel prope apicem 1-3 denticulata, costa media supra prominula, nervis lateralibus utrinque 9-12, venulis reticulatis tenuibus, foliis juvenalibus subtus nervos secus pilis sparsis longis et lepidotis fuscis dispersis tectae; petioli 8-10 mm longi, juventute pilosis et lepidoti. Inflorescentiae masculinae paniculatae, axibus pilosis et lepidotis stellatis, floribus 3-4 aggregatis; flores feminei: stylis 3, vix 1 mm longis. Infructescentiae 5-7 cm longae; fructus versus axem superiorem aggregati; cupulae sphaericae, pariete 3-5 mm crassae, spinis 10-15 mm longis ad basin in fasciculis coalescentibus confertim obtectis inclusis 60-80 mm latae, in 4 valvatis vix regulatim dehiscentes, nuce singulare cinctae; nuces late conoideae, 20-35 mm diam., pilis adpressis brevibus tectae, cicatrice ad basin sitae.

YUNNAN: Ping-Bien Xian, K.M. Feng 5144 (type); eod. loco, P.Y. Mao 2824.

西畴锥 (新种)

乔木, 高约15米, 胸径28厘米, 树皮不规则片状剥落, 小枝粗糙, 干后暗褐色, 有一层灰色薄膜层, 散生皮孔, 无毛。叶硬革质, 椭圆形或卵状椭圆形, 稀倒卵状椭圆形, 长10-5厘米, 宽3.5-6厘米, 顶部短尖, 基部圆或宽楔形, 有时一侧稍短或偏斜, 中脉在叶面稍凸起, 侧脉每边10-13条, 在叶面细裂缝状凹陷, 支脉不显, 叶缘自下或中部起有锯齿状裂齿, 嫩叶背面红棕色, 散生薄片状、圆形、中央淡褐色细鳞片, 成长叶变灰白色, 鳞片紧贴; 叶柄长1.5-2.5厘米。果序长10-30厘米, 果序轴横切面径6-10毫米。壳斗密集, 连刺径35-40毫米, 刺3-5-7条在基部或中部合生成刺束, 刺束均匀散生, 将壳斗外壁完全遮蔽, 每壳斗有坚果2-3个; 坚果阔圆锥形, 横径约12毫米, 密被棕色伏毛。

云南: 西畴, 海拔1430米, 王达明76-222 (模式) (云南林科所标本室)。

Castanopsis xichouensis H.C., sp. nov.

proxima *C. fabri* Hance, sed cupulis majoribus, spinis longioribus et densioribus, glandibus pubescentibus differt.

Arbor 15 m alta, trunco 28 cm diam., cortice irregulariter ruptile delapso, ramulis scabris, in sicco fusco-brunnescentibus, strato membranaceo cinereo et lenticellis dispersis, glabris. Folia crasso coriacea, elliptica vel ovato elliptica, raro obovato elliptica, 10-15 cm longa, 3.5-6 cm lata, apice acuta, basi rotunda vel late cuneata, interdum uno latere brevior vel obliqua, costa media supra leviter prominula, nervis lateralibus utrinsecus 10-13, supra canaliculate impressis, venulis tertialibus inconspicuis, margine e basi vel medio ad apicem serrata, juvenalia subtus rubro brunnea, lepidotis tenuibus orbiculatis, in centro brunneis sparsis oblecta, adulta glaucescentia, lepidotis adpressis; petioli 1.5-

2.5 cm longi. Infructescentiae 10—30 cm longae, axe 6—10 mm in diam. Cupulae multae, cum spinis 35—40 mm diam., spinis 3—5—7 ad basin vel mediam in fasciculis connatis confertis, glandes 2—3 includentes, glandibus late conoideis circa 12 mm latis, pilis densis et adpressis brunneis tectis.

YUNNAN: Xichou Xian, alt. 1430 m, Wang D.M. 76—222 (type) (Institute of Forestry, Yunnan).

大明山锥 (新种)

乔木, 高 9 米, 胸径 16 厘米, 树皮暗褐色, 网状纵裂, 小枝及叶片均无毛。叶硬革质, 卵形或宽椭圆形, 长 6—11 厘米, 宽 3—5.5 厘米, 顶端钝或圆或短急尖, 基部宽楔形, 略沿叶柄下延, 两面色, 干后暗褐或带暗黄色, 边全缘, 稍向背卷, 中脉在叶面平坦或上段凹陷, 侧脉每边 8—10 条, 在叶面细沟状凹陷, 未达叶缘即二歧分枝, 小支脉相互交织成脉网; 叶柄长 5—8 毫米, 粗 3—2 毫米。果序长约 5 厘米, 有果少数; 壳斗宽卵形或倒卵形, 连刺长 20—25 毫米, 刺在基部稍上合生成束并横向速生成 4—5 个刺环, 长 5 毫米, 被灰棕色微柔毛, 壳壁的近轴面无刺, 壳斗有 1 坚果; 坚果宽圆锥形, 宽达 20 毫米, 无毛, 果脐位于底部。

广西: 大明山, 海拔 1,100 米, 大明山调查队 74101 (模式); 同地, 海拔 2,300 米, 蔡灿星 5058。

Castanopsis damingshanensis S.L.Mo,* sp. nov.

Species *C. crassifoliae* Hick. et A. Camus similis, quae petiolis longioribus, foliis subtus lepidotis dilute argyllaceis tectis, cupulis 3 glandibus cinctis differt.

Arbor 9 m alta, trunco 16 cm diam., cortice fusco-brunneo, reticulatim fisso, ramulis foliisque glabris. Folia duro coriacea, ovata vel late elliptica 6—11 cm longa 3—5.5 cm lata, apice obtusa vel rotunda vel subito acuta, basi late cuneata, leviter decurrentia, concoloria, in sicco fusco-brunnescentia vel fulvida, margine integra parum recurvata, costa media supra plana vel parte superiore impressa, nervis lateralibus utrinsecus 8—10, supra sulcato impressis, ante marginem dichotomis, venulis inter se reticulatim conjunctivis; petioli 5—8 mm longi, 3—2 mm crassi. Infructescentiae circa 5 cm longae, fructus nonnihil gerentes; cupulae late ovoideae vel obovoideae cum spinis supra basin in annulis 4—5 circa 5 mm longis, griseo brunneis, pilosellis disjunctim connatis inclusis 20—25 mm longae, ante axem sine spinis armatae, nuce singulare cinctae; nuces late conoideae, ad 20 mm latae glabrae, cicatrice ad basin sitae.

GUANGXI: Da-Ming-Shan, alt. 1,100 m, Exped. Da-Ming-Shan 74101 (type); eod. loco, alt. 2,300 m, C.S. Tsai 5058.

*莫新礼, 广西林业勘测设计院 Guangxi Academy of Forest Exploration and Planning.

黑叶锥 (新种)

乔木, 高10—20米, 胸径20—50厘米; 芽宽卵形, 两侧压扁状, 枝黑褐色或褐灰色, 散生灰黄色皮孔, 小枝及叶约无毛。叶革质, 干后灰褐或褐黑色, 质脆, 卵形, 卵状椭圆形, 稀披针形, 长8—15厘米, 宽3—6厘米, 顶部渐尖, 基部近于圆或短尖, 有时一侧偏斜, 全缘, 中脉在叶面平坦或微凹陷, 侧脉每边10—14条, 纤细, 网状叶脉明显, 嫩叶两面色, 成长叶背面有灰白色紧实的蜡鳞层; 叶柄长10—20毫米。雄花序穗状或圆锥花序, 长8—15厘米; 雄花的雄蕊12枚, 花丝长5—6毫米; 雌、雄花序轴均被灰色微柔毛。果序长5—12厘米; 壳斗球状, 连刺径40—50毫米, 刺连生成刺束或鸡冠状刺环, 壳斗外壁及刺被灰或黄灰色短柔毛, 内壁被棕色长绒毛, 每壳斗有坚果1个; 坚果宽卵形, 顶端短突尖, 横径15—20毫米, 被短毛, 果脐约坚果面积的1/3。

壳斗的刺横向连生成环状刺束, 此特征与元江锥 *C. orthacanthus* Franch. 相似, 惟本种的壳斗包着坚果仅1个, 故可区别,

江西: 定南县, 海拔200—400米, 杨志斌、姚淦2316 (模式); 宁都县, 胡启明5711。

福建: 邵武县, 江耀如, 无号 (1978年11月)。

广东: 封开县, 海拔450米, 梁宝汉82449; 同地, 丁广奇6271。

广西: 梧州, 铜罗山, 海拔250—300米, 陈少卿10235。

Castanopsis nigrescens Chun et Huang, sp. nov.

C. orthacanthae Franch. similis, cupula spinis confertim fasciculatis zonatis erectis, basi in truncum saepe confluentibus armata, sed involucre nuce una incluso differt.

Arbor 10—20 m alta, trunco 20—50 cm in diam.; gemmae late ovoideae, a bilateralibus compressae, ramis atro-brunneis vel brunneo-fuscatis, lenticellis cinereo-flavis dispersis, ramulis et foliis glabris. Folia coriacea, in sicco cinereo-brunnea vel brunneo-fuscata, crustacea, ovata; ovato-elliptica raro lanceolata, 8—15 cm longa et 3—6 cm lata, apice acuminata, basi subrotunda vel acuta, interdum uno laterale leviter obliqua, integra, costa media supra plana vel leviter impressa, nervis lateralibus utrinque 10—14, gracilibus, nervulis reticulatis conspicuis, folia juvenalia utrinque paginis concoloria, matura subtus lepidotis adpressis cinerascens tecta; petioli 12—20 mm longi. Inflorescentiae masculinae spicatae vel paniculatae, 8—15 cm longae; flores masculini: staminibus 12, filamentis 5—6 mm longis; inflorescentiae femineae et masculinae axes puberuli cineri. Infructescentiae 5—12 cm longae; cupulae sphaeroides, cum spinis fasciculis vel cristis conjunctis puberulis cinereis vel luteo-cinereis, 40—50 mm in diam., intus brunneae villosae, glandem unicam includentes; glandes late ovoideae, apice breviter acutae 15—20 mm in diam., adpresse puberulae, cicatrice circa 1/3 glande occupantae.

JIANGXI: Ding-Nan Xian, alt. 200-400 m, Yang, Z. B., Yao, J. 2316 (type); Ning-Dou Xian, Hu, C. M. 5711.

FUJIAN: Shao-Wu Xian, Jiang, Y. R. . s. n (1978, Nov.).

GUANGDONG: Fong-Kai Xian, alt. 450 m. Liang, P. H. 82449; eod. loco, Ding, G. Q. 6271.

GUANGXI: Wu-Zhou, Tong-Lo-Shan, alt. 250—300 m Chen, S. H. 10235.

本新种曾被农林植在江西农业大学学报 1: 33; 1983 代为刊登, 文内有一段拉丁夹杂英文的特征摘要和稍详细的中文描述, 引证了雌花及雄花的各一号标本。但 (1) 未标明何者为模式; (2) 均无采集人姓名; (3) 只标明 1555 号标本保存于庐山植物园。

据 ICBN 第 2 章第 2 节第 4 (b) 条的规定, 我们本意指定后选模式 *lectotype*, 但鉴于农林植引用的 2 张标本都只有花。如众周知, 壳斗科植物的分种特征主要地着重在成熟的壳斗和坚果。基于此, 我们只好另定新模式 *neotype*。

又据第 4 章第 2 节第 8 条的规定 “...新分类群名称的发表只有指出其命名模式时, 才算合格发表, 明确地用 *typus* 或 *holotypus* 字样标明。” 农林植并未遵循这条规定, 故属不合法发表。

乐东锥 (新种)

乔木, 高 18 米, 胸径 20 厘米, 小枝暗褐或褐黑色, 皮孔多, 黄棕或白灰色, 新生枝及花序轴均被微柔毛及红棕色细片状蜡鳞, 二者均早脱落。叶硬纸质, 长圆形, 长 5—9 厘米, 宽 2—3.5 厘米, 顶部短尖或短尾状尖, 基部短尖, 有时两侧稍不对称, 叶缘有疏浅裂齿, 中脉在叶面凹陷, 侧脉每边 9—12 条, 支脉甚纤细或不显, 嫩叶背面沿中脉被早脱落的疏长伏毛, 兼有红褐色细片状稍紧实的蜡鳞层; 叶柄长稀稍超过 1 厘米。雄圆锥花序长达 10 厘米; 果序长达 11 厘米; 壳斗近圆球形, 连刺横径 20—25 毫米, 下部及向轴面无刺, 基部突然收窄且略延长呈短柄状, 刺长 3—6 毫米, 横切面三或四角形, 基部宽而扁, 有时多条在基部横向连生呈鸡冠状, 被微柔毛及棕色蜡鳞; 坚果宽圆锥形, 横径 10—12 毫米, 顶端锥尖, 有稀疏细伏毛, 果脐位于坚果底部。

海南: 乐东县, 尖峰岭, 黄全 820969 (果, 模式), 黄全 820959 (果); 同地, 广东林科所 108635 (花)。

Castanopsis ledongensis H. C., sp. nov.

Species cupulis sphaeroideis, cum spinis 15—25 mm in diam., ad basin subito constrictis et leviter elongatis in stipitem brevem suffultis, *C. echidnocarpae* A. DC. similis, quae foliis juvenalibus et ramulis glabris, foliis adultis subtus fulvo cinerascentibus, adpresse lepidotis, petiolis longioribus, cupulis spinis brevioribus armatis, glandibus glabris differt.

Arbor 18 m alta, trunco 20 cm diam.; ramuli fusco brunnei vel brunneo-nigri, lenticellis fulvis vel glaucis numerosis dispersi; ramuli juvenales et inflorescentiae axis pilis puberulis et lepidotis rubris squamosis mox caducis oblecta. Folia duro papyracea, oblonga 5—9 cm longa, 2—3.5 cm lata, apice acuta vel brevicaudata, basi acuta, interdum parum inaequalateralia, margine denticulata, costa media impressa, nervis lateralibus utrinsecus 9—12, nervulis satis gracilibus vel inconspicuis, foliis juvenalibus subtus ad costam

mediam sparse pilosis mox glabratis, strato lepidoto squamuloso rubro brunneo adpresso tectis; petioli raro 1 cm superantes. Inflorescentiae masculinae paniculatae, ad 10 cm longae. Infructescentiae 11 cm longae; cupulae subsphaericae spinis 3—6 mm longis inclusis 20—25 mm longae, spinis in sectione transversali tri-vel quadrangularibus, basi planis et dilatatis, nonnullis ad basin transversis cristatis coalescentibus, pilosellis et brunneo lepidotis; nux late conoidea 10—12 mm diam., apice acuta, sparse pilosella, cicatrice ad basin sita.

HAINAN: Le-Dong Xian, Jian Feng Ling, Huang Quan 820969 (Fr., type) 820959 (fr.); eod. loco, Guangdong Inst. Forestry 108635 (fl.),

变色锥 (新组合)

Castanopsis rufescens (Hk.f. & Th.) H.C., comb. nov.

Quercus rufescens Hook.f. Fl. Brit. Ind. 5:620. 1888, pro syn. sub *C. hystrix* Miq. — *Castanopsis tribuloides* var. *wattii* King ex Hook.f. l. c. 5:623. 1888; King in Ann. Roy. Bot. Gard. Calc. 103, pl. 96, f. 4. 1889 — *C. wattii* (King ex Hk.f.) A. Camus, Chataig. 421. 1929, Atlas pl. 76, f. 12—19. 1928 — *C. hystrix* subsp. *rufescens* (Hk.f. & Th.) A. Camus, Chataig. 293. 1929, Atlas pl. 27, f. 6—10. 1928 — *C. tribuloides* auct. non (Sm.) A. DC.: Soepadmo sched., quoad specim. e China.

云南: 保山至腾冲路上, Rock J.F. 6714, 6739, 7205 (A*); **西藏:** 墨脱, 海拔850—1,100米, 青藏植被队 (74) 2882, 2934, 2990, 3012, 3155 (北京植物所生态室标本)。Sikkim, 5—8,000 ft., regio temp., Hooker J.D. sine numero (isoholotype, A); West Bengal, 7,000 ft. Bogle A.L. & Bogle, M.p. 225; Eastern Himalaya, above Sonda, 7,000 ft. Cave, S.H. sine numero (8.5. 1913); Darjeling, 7,500 ft. Brandis D. 1353 (以上存A); East Bengal, Herb. Griffith 4445; Gamble J.S. 6921c; Hooker J.D. 110; Kurz S sine numero (8/10/68) (以上存P**).

本种的嫩叶背面沿中脉及叶柄有稀疏的长伏毛; *C. fabri* Hance则无或几无毛; *C. ceratacantha* Rehd. et Wils.则密被长柔毛。本种分布于沿喜马拉雅山的东南段; 第二种见于北回归线以南; 最后一种见于川西、滇北及黔东南。

A. Camus的专著 (见文献引证) 中, 在分种检索里 *C. hystrix*, *C. rufescens*, *C. laotica*三者均属同一个种的编号, 依她系统次序, 均编入第7个种。在描述文之前, 后二者均以较大一号字体标明它们是亚种 sous-espece。很清楚, 这格式表明后二者都是 *C. hystrix* 的两个亚种。我们认为, 本种与 *C. hystrix* 的区别是种一级的区分。

苦槠钩锥 (新杂交种)

叶与苦槠的相似, 壳斗外壁的两侧面及顶部有短刺, 其余为覆瓦状排列、紧贴壳壁略呈三角形的鳞片状小苞片覆盖; 壳斗比钩锥小, 但比苦槠的大。

* A: Arnold Arboretum, Mass. U.S.A.

** P: Museum National D'Histoire Naturelle, Paris, France

湖南: 长沙, 岳麓山, 海拔200米, 肖家庚2884 (模式); 同地, 陈青莲34 (♂); 同地, 黄成就, 无号 (1978年2月17日)。

在岳麓山, 分布于本杂交种之上 (即海拔约200米以上) 的是以钩锥和樟属为主的常绿阔叶林, 位于其下的是以苦槠、青冈和樟属为主的常绿阔叶林。由此推论, 本杂交种的父本很可能是钩锥, 母本则是苦槠。

Castanopsis tibetana* × *sclerophylla

Folia quae *Castanopsidi sclerophyllae* similia; cupulae superficiete lateralibus et apice spinulosis armata, cetera bracteis squamiformibus imbricatis adpressis plus minusve triangulatis oblecta; cupulae *C. tibetana* parviora, sed quam *C. sclerophylla* majora.

HUNAN: Chang-Sha, Yue Lu Shan, alt. 200 m., Xioa J.G. 2884 (type, fr.); same locality, Chen Q.L. 34 (fl.); Huang C.C. without number (17.2.1978).

Hybrids of *Castanea* all are those of cultivated species, were recorded in China, countries in Europe and Americas. As to *Castanopsis*, so far as to our knowledge, is the first time report on a number of the fruiting trees are growing wild in forest Yue-lu Shan, Hunan province. This natural hybrid was found on the slop about 200 metres above S.I., down below where, *Castanopsis sclerophylla*, *Quercus* spp. of subgen. *Cyclobalanopsis* and members of *Lauraceae* are dominant, on the slop above where, *Castanopsis tibetana* was found and of course many elements of *Lauraceae* and coniferous trees. So that the paternity of this hybrid is probably *C. tibetana*, and its maternity is *C. sclerophylla*.

钻刺锥

Castanopsis subuliformis Chun & Huang, sp. nov.

乔木, 高达25米, 胸径50厘米, 当年生枝暗褐色, 与果序轴相同均无毛而有多数皮孔。叶硬纸质, 长圆形或披针形, 长7—14厘米, 3—5厘米, 顶部短至长尖, 基部近于圆或甚短尖, 有时一侧稍短且略偏斜, 叶缘在近顶部有少数浅裂齿或兼有甚少数全缘叶, 中脉在叶面凹陷, 侧脉每边11—14条, 支脉不显, 叶背有红棕或黄棕色可抹落的细片状蜡鳞层; 叶柄长约1.5厘米。花未见。果序长达11厘米, 果序轴横切面径3—4毫米; 壳斗圆球形, 连刺径15—20毫米, 暗黑褐色, 刺锥尖状, 长2—5毫米, 基部宽而粗壮, 散生, 被灰黄色微柔毛及细片状蜡鳞, 每壳斗有1坚果, 坚果略扁的圆锥形, 宽约15毫米, 高约12毫米, 密被棕色稍长的伏毛, 果脐位于坚果底部。果期12月。

广东 (封开县), 陈少卿18407 (模式)、18409;

广西 (南宁郊外), 泰仁昌, 8356。生于海拔700—900米山地或密林中。

Castanopsis subuliformis Chun & Huang, sp. nov.

Species foliorum forma et textura *C. fargesii* Franch. valde similis, sed differt cupulis spinis satis brevibus et paucioribus, individuis liberis solitariis dispersis, glandibus pilis adpresse et dense pubescentibus oblectis,

Arbor ad 25m alta, trunco circa 50 cm diam.; ramuli hornotini atro-brunnei atque infructescentiae axes glabri et lenticellis multis dispersi. Folia duro papyracea, oblonga vel lanceolata, 7—14 cm longa 3—5 cm lata, apice acuta vel acuminata, basi subrotunda vel late acuta, interdum latere uno paullo brevior et subobliquo, margine prope apicem paucidentato vel simulque aliquot integro, costa media supra impressa, nervis lateralibus utrinsecus 11—14, nervulis inconspicuis, foliis subtus squamatis lepidotis rubro-vel flavobrunneis detergendis obtectis, petioli 1.5 cm longi. Flores non visi. Infructescentiae ad 11 cm longae, axibus 3—4 mm crassis, cupulae globulares, cum spinis 15—20 mm diam., atro-brunneae, spinis conicis 2—5 mm longis, basi crassis et valdis, pilis glaucescenti-flavis brevissimis et lepidotis squamatis ornatae, nuce una per quoque cupula, nuces compresso conicae, circa 15 mm latae 12 mm altae, dense et adpresse pubescentes, cicatrice basali.

GUANGDONG: Feng-Kai Xian, S. H. Chen 18407 (type), 18409.

GUANGXI: Nanning, alt. 850m, in woods, R. C. Ching 8356.

柯属 *Lithocarpus* Bl.

大苗山柯 (新种)

Lithocarpus damiaoshanicus H. C., sp. nov.

亲缘种是 *L. cleistocarpus* (Seem.) Rehd. et Wils., 其区别是本种的叶片顶部渐狭而弯钩的甚长尖, 壳斗通常全包、稀包着坚果的绝大部分。

高 7—15 米的乔木, 胸径 15 厘米; 芽细小, 芽鳞无毛; 当年生枝有槽棱, 二年生枝干后灰或暗黑褐色, 散生淡黄至棕黄色皮孔。叶革质, 稍硬, 披针形或长椭圆形, 通常两侧不对称, 连叶柄长 7—15 厘米, 宽 2—6 厘米, 顶部渐狭而弯钩的甚长尖, 基部短尖, 沿叶柄下延, 叶边缘全缘, 中脉在叶面由中段至基部微凸起, 但中脉的中间呈裂槽状凹陷, 上半段平坦或微凹陷, 侧脉每边 6—9 条, 在近叶缘附近弧形上弯, 彼此不连接, 支脉甚纤细或不明显, 叶面及叶柄干后常有灰白色粉霜, 叶背面有紧实的蜡鳞; 叶柄长 1.5—2 厘米, 雄穗状花序腋生, 花序轴有褐锈色、细片状、颇松散的蜡鳞; 穗状果序稀长于 10 厘米, 花序轴粗 4—8 毫米, 壳斗每 3 个聚生成簇, 二年成熟; 壳斗宽陀螺形, 顶部近于平坦或浑圆, 多数几全包坚果或同时包着坚果的绝大部分, 高 20—25 毫米, 宽 20—30 毫米, 小苞片位于壳斗顶部的为三角形, 紧贴壳壁, 覆瓦状排列或近于环状排列, 下部的不明显或仅呈条纹状; 壳壁的中部厚 3—5 毫米; 坚果宽陀螺状, 被粉末状伏毛, 果脐凸起, 占坚果面积的 2/3 以上。

广西: 大苗山, 陈少卿 16833, 17025, 17039, (模式); 李绍基 71003。

Lithocarpus damiaoshanicus H. C., sp. nov.

L. cleistocarpo (Seem.) Rehd. et Wils. affinis, a quo differt foliis apice curvatim et sensim acuminatissimis, cupulis fere totas glandes interdum simulque maximam partem amplexantibus.

Arbor 7—15m alta, trunco 15 cm diam.; gemmae parvae, squamis glabris; rami hornotini angulati et sulcati, annotini in sicco grieseo-vel atro-brunnei, lenticellis flavis vel fuscis dispersis ornati, Folia crassiuscule coriacea, lanceolata vel elongate elliptica, plerumque inaequilatera, cum petiolis 7—15 cm longa 2—6 cm lata apice sensim et curvatim acuminatissima, basi acuta, decurrentia, margine integra, costa media supra e parte mediana ad basin prominula, sed in medio costae sulcato canaliculata, parte superiore plana vel impressa, nervis lateralibus utrinsecus 6—9, prope marginem arcuatim curvatis, inter se haud connectis, nervulis satis gracilibus vel inconspicuis, foliorum facie supra et petiolis in sicco saepe farinis cineraceis obtectis, subtus squamis lepidotis adpressis adnatis; petioli 1.5—2 cm longi. Inflorescentiae masculinae spicatae, axillares, axibus squamis brunneo-ferrugineis satis tenuibus aliquantum laxis tectis; spicae fructiferae raro 10 cm superantes; axes 4—8 mm crassi lenticellati, fructibus ternatim glomeratis biennibus; cupulae late turbinatae, apice planiusculae vel rotundatae, fere totas glandes amplexantes, 20—25 mm longae 20—30 mm latae, bracteolis superioribus deltoideis approximatis imbricatis vel subcircularibus, inferioribus obscuriusculis vel striolatis; cupularum parietes ad partem medianam 3—3.5 mm crassae; nubes late turbinatae, pilis farinaceis adpressis obtectae cicatrice convexa usque 2/3 partem glandis occupante.

GUANGXI, Da-Miao-Shan, S. H. Chen 16833, 17025, 17039(type); G. T. Li 71003.

栎属 *Quercus* L.

坝王栎 (新种)

小乔木, 高约 6—8 米, 胸径约 20 厘米, 新生嫩枝有纵沟棱, 与嫩叶叶柄、叶背沿中脉两侧及雄花序轴被甚纤细的微柔毛和星状短毛, 二年生枝有多数呈灰白色微凸起的皮孔, 小枝干后茶褐色。叶略硬纸质, 卵形或椭圆形, 长 4—6 厘米, 宽 1.5—2.5 厘米, 顶部短尖至渐尖, 基部宽楔形至圆, 两侧有时略不对称, 中脉在叶面平坦或微凸起, 叶边缘有甚短小的浅裂齿, 侧脉每边 6—9 条, 常直达齿端, 侧脉间的叶肉部份稍隆起, 支脉尚可见; 叶柄长 5—8 毫米。雄圆锥花序密生于当年生枝的近顶部, 下垂或半下垂, 每花有雄蕊 (3—) 4 (—5) 枚, 花药与花丝近等长; 雌花序甚短。果序长 3—6 毫米, 通常有成熟壳斗 1 个, 壳斗浅碗状, 包着坚果 1/3—1/4, 高 3—5 毫米, 口径 9—12 毫米, 小苞片卵圆形至顶端为钝的三角形, 紧贴壳壁, 覆瓦状排列, 被灰白色微柔毛及蜡鳞; 坚果宽椭圆形, 下宽上窄,

高10—12毫米，栗褐色，无毛，顶部柱座高约1毫米，果脐径5—6毫米。

海南：昌江县，坝王岭，石灰岩山地，海拔980米，邢福武，1988年11月5日，无号（果，模式），同地，海拔900米，李泽贤4148（♂）。

Quercus bawanglingensis Huang, Li* et Xing[†], sp. nov.

Q. phillyraeoidi A. Gray arcte affinis, differt foliorum superficiebus inter nervos laterales prominulis, petiolis longioribus, cupulis minus altis, $1/3-1/4$ glandem cingentibus, glandibus comparate minoribus.

Arbuscula 6—8 m alta, trunco 20 cm in diam., ramulis hornotinis canaliculatis, foliisque juvenalibus subtus axibus pilis tenuibus puberulis simplicibus atque stellatis obtectis, ramis biennibus lenticellis cinereis pluribus dispersis. Folia crasse papyracea, ovata vel elliptica, 4—6 cm longa et 1.5—2.5 cm lata, apice acuta vel acuminata, basi late cuneata vel rotunda, interdum inaequilateralia, superficierum partibus inter nervos laterales prominulis, margine brevissime denticulata, costa media supra plana vel prominula, nervis lateralibus utrinsecus 6—9, dentis apicem attingentibus, nervulis reticulatis satis gracilibus; petioli 5—8 mm longi. Inflorescentiae masculinae paniculatae, prope apicum ramuli nascentes, pendulae vel semi-pendulae, staminibus (3)4(5), filamentis antheras longitudine subaequantibus; inflorescentiae femineae abbreviatae. Infructescentiae 3—6 mm longae, fructus maturum unum plerumque gerentes; cupula cupelliformis, 3—5 mm alta 9—12 mm lata, glande $1/3-1/4$ cingens, bracteis ovatis vel obtuse triangularibus, adpressis, imbricatis, pilis cinereis brevissimis et lepidotis tectis; glandes late ellipsoideae, partibus inferioribus quam superioribus latioribus, 10—12 mm altae, castaneae glabrae, stylodio circa 1 mm alto, cicatrice 5—6 mm diam.

HAINAN, Chang-Jiang Xian, Ba-wang-ling, alt. 980 m, calciphile, F.W. Xing, number wanted (5.11.1988, fr. type); same locality, Z.X. Li 4148 (male fl.).

• Li=Li Ze Xian, SCIB.

† Xing=Xing Fa Wu, SCIB.