VIII. *Descriptions of Three New Genera of Plants in the Malayan Herbarium of the late*
Dr. A. C. MAINGAY. By Prof. OLIVER, F.R.S., F.L.S., &c.

(Plates XLII.–XLIV.)

Read April 18th, 1872.

PTELEOCARPA, Oliv.

Olacinearum genus novum.

Flores hermaphroditi. *Calyx* 5-partitus, lobis imbricatis, fructifer immutatus. *Petala* 5 in corollam profunde 5-fidam connata, lobis patentibus æstivatione imbricatis. *Stamina* 5, corollæ tubo inserta, ejusdem lobis alterna, filamentis filiformibus, antheris linearibus v. lineari-lanceolatis basifixis. *Ovarium* liberum 2-loculare compressum glabrum, basi in discum subæquilatum elevatum continuum; styli 2 subæquales erecti; stigmata terminalia compressiuscula oblique subspathulata aut vix dilatata; ovula in quoque loculo solitaria pendula anatropa, raphe laterali v. subventrali. *Fructus* compressus samaroideus orbicularis, ambitu late alatus, alis radiatim nervosis, apice bifidus, centro vix turgidus, 2-locularis. *Semina* in loculis solitaria pendula elongata compressa, basi angustata, raphe lateraliter notata, albuminosa; albumine uniformi, embryo dimidio brevior; radícula supera cylindrica v. subclavata; cotyledones lineari-lanceolatae obtusiusculæ radícula longiores.

Arbor glabra. *Folia* alterna simplicia oblongo- v. oblanceolato-elliptica integra petiolata exstipulata. *Inflorescentia* terminalis paniculata multiflora. *Flores* pedicellati, flavi v. coccinei.

P. MALACCENSIS, Oliv., sp. unica. Glaberrima. Ramuli teretes. Folia breviter et obtusiuscule acuminata, basi in petiolum angustata, membranacea v. tenuiter coriacea, subtus nervo medio subprominente percursa, nervulis secundariis subdistantibus marginem versus evanescentibus; lamina 3–5 poll. longa, $1\frac{1}{4}$ –2 poll. lata; petiolus gracilis $\frac{1}{3}$ – $\frac{3}{4}$ poll. longus. Paniculae terminales tempore florifero folia paulo aut vix superantes, ramulis adscendentibus compressiusculis minute puberulis, bracteis minutis ovato-deltoides acutis $\frac{1}{20}$ – $\frac{1}{24}$ lin. longis; pedicelli graciles nonnunquam in cymulas umbelliformes aggregati, $\frac{1}{4}$ – $\frac{1}{3}$ poll. longi. Flores flavi v. coccinei glabri $\frac{1}{3}$ poll. diametro. Calyx 5-partitus, lobis subæqualibus ovato-rotundatis obtusis, æstivatione imbricatis. Corolla calyce 4-plo longior, gamopetala, tubo brevi, limbo 5-partito æquali, lobis oblanceolato-oblongis obtusis. Stamina 5, corollam subæquantia, ejusdem sinubus inserta; filamenta filiformia glabra; antheræ basifixæ lineares v. lineari-lanceolatae, basi 2-lobatae, 2-loculares, longitudinaliter dehiscentes. Ovarium liberum glabrum compressum 2-loculare obscure longitudinaliter sulcatum, in disco elevato æquilato et subæquilongo insertum, apice in stylos angustatum. Ovula in loculis solitaria anatropa pendula. Fructus erectus orbicularis samaroideus compressus 2-locularis, ambitu late alatus, apice emarginatus, $1\frac{1}{4}$ – $1\frac{1}{2}$ poll. diam., alis integris $\frac{1}{2}$ – $\frac{2}{3}$ poll. latis, radiatim nervosis. Semina in loculis solitaria pendula

elongata basin versus angustiora compressa, raphe laterali notata, $\frac{1}{2}$ poll. longa; albumen carnosum; embryo albumine dimidio brevior rectus v. curvulus, radícula supera cylindrica v. subclavata cotyledonibus anguste lineari-lanceolatis paulo brevior.

Hab. Malacca, *Dr. Maingay*! We have received the same or a closely allied species from Borneo, both from the late Mr. Motley and from M. Beccari (no. 1611).

CTENOLOPHON, Oliv.

An *Olacinearum* genus novum anomalum?

Flores hermaphroditi. *Calyx* 5-sepalus coriaceus persistens fructifer immutatus; sepala rotundata concava, æstivatione late imbricata. *Petala* 5 libera oblonga apice sub anthesin reflexa, æstivatione contorto-imbricata. *Stamina* 10 libera glabra in disco hypogyno brevissimo annulari inserta; filamenta filiformia, alterna breviora; antheræ rotundatæ obtusæ et brevissime apiculatæ, 2-loculares, longitudinaliter dehiscentes; pollinis granula majuscula compressa polygonæ. *Ovarium* liberum brevissime stipitatum hirsutum septo perforato biloculare, in stylum longiusculum apice 2-fidum continuum; stigmata terminalia capitellata; ovula in loculis geminata pendula collateralia. *Fructus* lignoso-coriaceus v. crustaceus, siccus, unilocularis, monospermus, ellipsoideus v. obovoideus obtusus, styli basi persistente apiculatus, pericarpio longitudinaliter rumpendo. *Semen* (perfectum non vidi) ab apice placentæ centralis liberæ pendulum, dorso per longitudinem crista arilloidea multifido-pectinata ornatum. *Embryo*

Arbores; ramuli teretes glabri. *Folia* opposita simplicia petiolata coriacea glabra integra elliptica v. oblongo-elliptica. *Inflorescentia* terminalis paniculata puberula v. incano-tomentella.

1. *C. PARVIFOLIUS*, Oliv. Foliis ellipticis breviter obtuse acuminatis, ovarii cavitate fere ad basin styli attingente.

Hab. Malaya, *Dr. Maingay*! (No. 382, Kew distr.)

Ramuli teretiusculi glabri cortice atro-purpurascente sublævi obducti. *Folia* opposita petiolata coriacea elliptica, breviter et obtuse acuminata, basi rotundata, integra, glabra, supra nitentia, subtus venulis prominulis grosse reticulata; lamina 2-3 ($-4\frac{1}{2}$) poll. longa, $1\frac{1}{4}$ - $1\frac{3}{4}$ poll. lata; petiolus canaliculatus $\frac{1}{3}$ - $\frac{1}{2}$ poll. longus, caule inter petiolos linea transversa notato. *Inflorescentia* terminalis cano-tomentosa folia vix aut paulo superantia; flores $\frac{1}{2}$ poll. longi numerosi breviter crassiuscule pedicellati, cymosim paniculati; pedunculi oppositi 2-3-chotome divisi; bractæ parvæ ovato-delloideæ lineam longæ caduæ; pedicelli tomentelli calycem æquantes v. eodem breviores. *Sepala* 5 rotundata concava coriacea late imbricata persistentia, fructus immutata, extus breviter tomentosa, intus subglabra. *Petala* 5 erecta, calyce 4-plo longiora, oblonga, apice denique plus minus recurva, coriacea, extus cano-puberula, margine æstivatione obtecto glabrato. *Stamina* 10 libera glabra intra marginem disci inserta; filamenta filiformia; antheræ rotundatæ breviter obtuse apiculatæ, dorsi prope basin affixæ. *Ovarium* globoso-ovoideum hirsutum, basi disco circumdati, brevissime et abrupte angustatum, 2-loculare, dissepimento utrinque lateraliter perforato apice completo, loculis fere ad basin styli attingentibus; ovula geminata collateralia pendula. *Stylus* elongatus basi dilatatus hirtus, sursum glaber 2-sulcatus, apice breviter 2-fidus; stigmata terminalia capitellata. *Fructus* ellipsoideus obtusus apiculatus 1-locularis $\frac{1}{2}$ - $\frac{3}{4}$ poll. longus, pericarpio sicco crustaceo-lignoso per longitudinem unilateraliter dehiscente. *Semen* (perfectum non vidi) ab apice placentæ centralis pendulum, dorso crista arilloidea bifariam pectinata ornatum.

2. *C. GRANDIFOLIUS*, Oliv. Foliis oblongo-ellipticis breviter obtuse acuminatis, ovarii cavitate discum hypogynum vix superante.

Hab. Malacca, *Dr. Maingay*! (No. 383, Kew distr.)

Arbor (Maingay). *Ramuli* teretes, crassitie pennæ anserinæ, glabri. *Folia* opposita petiolata coriacea oblongo-elliptica v. ovato-oblonga, breviter et obtuse acuminata v. obtusa, basi rotundata v. cuneata, integra, glabra, subtus nervo medio prominente venulis lateralibus subprominulis, $3\frac{1}{2}$ –7 poll. longa, $1\frac{1}{2}$ – $2\frac{1}{2}$ poll. lata; petiolus glaber v. puberulo-pruinosis $\frac{1}{3}$ – $\frac{1}{2}$ poll. longus. *Inflorescentia* terminalis subpyramidalis multiflora cano-puberula; pedunculi adscendentes nodis quasi articulati; bractæ parvæ squamiformes caduæ; pedicelli calycem subæquantes. *Flores* $\frac{1}{3}$ – $\frac{1}{2}$ poll. longi. *Sepala* 5 æqualia rotundata concava coriacea cano-tomentella, intus glabra, æstivatione late imbricata. *Petala* 5, calyce 5–6-plo longiora, libera, lineari-oblonga cano-tomentosa, denique apice recurva, æstivatione contorto-imbricata. *Stamina* 10, libera, alterna breviora, glabra, intra marginem disci hypogyni inserta; filamenta filiformia; antheræ rotundatæ biloculares, longitudinaliter dehiscentes, breviter et obtuse apiculatæ, prope basin dorsi affixæ; pollinis granula 5–6-gona compressa majuscula. *Ovarium* ovoideum, dense hirsutum, basi disco circumdato brevissime angulatum glabrum, biloculare, dissepimento utrinque perforato; stylus subvalidus, sursum glaber, breviter bifidus; stigmata capitellata terminalia; ovula in loculis geminata collateralia pendula. *Fructus* . . .

MAINGAYA, Oliv.

Hamamelidearum genus novum.

Flores hermaphroditi, pentameri. *Calyx* in alabastro clausus, tubo persistente brevi turbinato-campanulato, truncato, indiviso, ovario adnato. *Petala* 5 perigyna elongato-linearibus, æstivatione circinatim valvata. *Stamina* isomera petalis alterna, filamentis brevissimis crassiusculis, antheris majusculis basifixis 2-locularibus, loculis in valvas duas subæquales a medio longitudinaliter solutas dehiscentibus, apice facie antica connectivo longiuscule, postica breviter producto; staminodia staminibus alterna eisdem fere æquilonga, lateraliter compressa, apice utrinque antice et postice producto. *Discus* 10-lobatus, lobis brevibus liberis oblongis. *Ovarium* semiinferum vel apice hirsuto tantum liberum, biloculare; styli 2 distincti breves; stigmata glabra subclavata v. oblongo-spathulata; ovula in loculis solitaria pendula. *Capsula* stipitata semisupera lignosa bilocularis, loculicide bivalvis, valvis truncatis breviter bicuspidatis bifidis; endocarpium corneum, vix solutum, cum epicarpio conforme. *Semen*

Arbor elata, ramulis gracilibus. *Folia* alterna indivisa petiolata persistentia; stipulæ caduæ parvæ. *Flores* capitati ebracteati; capitulis globosis multifloris (circ. 15-floris) pedunculatis quasi terminalibus. *Species* unica.

M. MALAYANA, Oliv. *Arbor* elata trunco gracili (*D. Maingay*). *Ramuli* graciles teretes glabri, internodiis sæpius $\frac{1}{2}$ – $1\frac{1}{2}$ poll. longis. *Folia* persistentia tenuiter coriacea petiolata alterna oblongo-lanceolata acuminata, basi rotundata, interdum leviter aut vix subcordata, integra, glabra, subtus nervo medio prominente instructa, 3–4 (2–6) poll. longa $1\frac{1}{4}$ – $1\frac{3}{4}$ ($\frac{5}{8}$ –2 poll.) lata; petiolus gracilis glaber $\frac{1}{2}$ –1 poll. longus. *Stipulæ* parvæ caduæ dense tomentellæ. *Pedunculi* solitarii quasi terminales graciles glabri v. obsolete tomentosi, $\frac{1}{4}$ – $\frac{3}{4}$ poll. longi. *Capitula* globosa circiter 15-flora per anthesin $\frac{3}{4}$ –1 poll. diam., floribus sessilibus dense compactis. *Calyx* in alabastro clausus oblongo- v. obovoideo-ellipsoideus, limbo tenui extus puberulo ante anthesin cir-

cumscisse caduco, sæpius etiam lateraliter rumpendo; tubo persistente turbinato-campanulato truncato indiviso ovario adnato. Petala apice obtusiuscula glabra $\frac{1}{2}$ -poll. longa. Capsula lignosa $\frac{1}{3}$ - $\frac{1}{2}$ poll. lata, basi in stipitem brevi crasso angustata, valvis liberis post dehisceniam calycis tubum adnatum $\frac{1}{4}$ poll. superantibus.

Hab. Penang, *Dr. Maingay.* (No. 1513, Kew distr.)

EXPLANATION OF THE PLATES.

PLATE XLII.

Pteleocarpa malaccensis, Oliv.

Fig. 1. Flower.

Fig. 2. Corolla laid open, with stamens.

Fig. 3. Anther.

Fig. 4. Calyx and pistil.

Fig. 5. Pistil.

Fig. 6. Vertical section of same.

Fig. 7. Apices of two seeds *in situ*. The seed to the left shows the lateral raphe on the near side of the testa.

Fig. 8. Seed.

Fig. 9. Embryo.

PLATE XLIII.

Ctenolophon parvifolius, Oliv.

Fig. 1. Bud.

Fig. 2. Vertical section of flower.

Fig. 3. Pistil.

Fig. 4. Young seed, with the placental axis and remains of abortive ovules.

Fig. 5. Calyx and mature seed, after removal of the pericarp, pendulous from the persistent separable placental axis.

Fig. 6. Same, with a portion of the pericarp, the calyx removed.

Fig. 7. Transverse section of (imperfect) seed showing the crested raphe.

Fig. 8. Vertical section of pistil of *C. grandifolius*.

Fig. 9. Dissepiment, partially perforate, of ovary of the same.

Fig. 10. A pollen-grain (greatly enlarged).

PLATE XLIV.

Maingaya malayana, Oliv.

Fig. 1. Bud.

Fig. 2. The same, the calyx-limb circumscribed at base and irregularly opening.

Fig. 3. Flower after fall of calyx-limb.

Fig. 4. The same, petals removed.

Figs. 5 & 6. Stamens.

Fig. 7. Stamen.

Fig. 8. Vertical section of ovary.

M. J. Oliver. del. W. H. Fitch lith.

J. N. Fitch imp.

Pteleocarpa malaccensis, Oliv.

M. J. Oliver, del. W. H. Fitch, lith.

Ctenolophon parvifolius. Oliv.

C. grandifolius.

M. J. Oliver, del. W. H. Fitch lith.

J. N. Fitch imp.