XXII. *Some Remarks on the Plants now referred to Sophora, with Characters of the Genus Edwardsia. By R. A. Salisbury, F.R.S. and L.S.*

Read December 16, 1806.

There is no genus in the vast natural order of *Leguminosæ*, which appears to me so great a disgrace to modern botanists, as *Sophora*. *Mimosa* indeed, I presume, must also be divided; but the species referred to it have all a strict affinity to each other, whereas *Sophora*, as it stands in the last edition of the *Systema Vegetabilium*, contains at least eight genera, very few if any of which will follow each other, in a natural series. Lamarck has detached two of these heterogeneous parcels, joining with them nevertheless some that are quite dissimilar in habit. Professor Willdenow on the contrary, strange to tell, has not only re-united these two genera of Lamarck's, but added to them a third still more discordant, and nearer allied to *Halodendrum*.

It is well known that our great master Linnè only regarded *Sophora* as a reservoir, into which he put every leguminous plant with distinct stamina, that he could not refer to any other established genus. Those which I think ought to be separated, are, 1st, *S. Monosperma* of Swartz: a tree with large pinnated leaves, somewhat like those of *Juglans*, no stipules, terminal panicles of flowers, and a broad hairy pod, containing one or two scarlet and black seeds as big as a small hazel-nut: 2dly, *S. Havanensis*, *Tomentosa*, *Occidentalis*, *Japonica* and *Heptaphylla*: these trees have

have pinnated leaves without stipules, terminal spikes of flowers, deciduous filaments; and the three first are probably all one and the same plant: 3dly, *S. Alopecuroides*, to which genus also belongs the *S. Flavescens* of Solander, first taken up from his MS. in *Hortus Kewensis:* these two oriental plants are herbaceous, have pinnated leaves without stipules, terminal spikes of flowers, and persistent filaments: 4thly, *S. Tetraptera* and *Microphylla*, of which genus a third species has been discovered in the Sandwich Isles: they have pinnated leaves without stipules, short axillary spikes of flowers, and deciduous filaments inserted in a large goblet-shaped 10-angular receptacle, which internally is callous; as soon as the petals and filaments fall off, the honey gushes out abundantly from their scars, a circumstance so singular that I believe no other instance has yet been observed: May we infer from it that this sweet secretion is destined to be absorbed by the young fruit? Does the honey in a hotter climate than ours, where these trees are indigenous, exude gradually from all the interior surface of the receptacle? for in *Iris Xiphium* I have seen it sweating out in hot sunshine, so as to form large drops even upon the external surface of the tube: 5thly, *S. Capensis:* this shrub is furnished with stipules, pinnated leaves, long axillary spikes of fragrant flowers, and a compressed pod: the *S. Aurea* of Solander, which Lamarck joins to it, is a very different tree, much nearer related to *Robinia*, where it has been placed by that excellent botanist L'Heritier: 6thly, *S. Genistoides:* to this shrub the *S. Ternata* and *Trifoliata* of Thunberg are probably allied: they have ternate leaves with stipules, axillary flowers, and differ essentially from the other Cape plants arranged under *Sophora*, in the structure of their calyx: 7thly, *S. Tinctoria, Australis, Lupinoides*, and *Alba:* these are herbaceous plants from North America, with ternate leaves,

large stipules, terminal spikes of flowers, and a very inflated pedicellated pod; most of them afford indigo, and look like species of *Crotolaria*, under which genus Linnè has inserted *S. Alba* in *Species Plantarum:* 8thly, *S. Buxifolia*, *Rotundifolia*, *Hirsuta*, *Calyptrata*, and *Biflora:* Professor Retzius first distinguished these shrubs, which all grow at the Cape of Good Hope, and I cannot see the smallest affinity in them to the preceding North American plants; they have exceedingly small stipules prest close to the stem, thick downy simple leaves, axillary flowers either solitary or in short spikes, and a calyx redoubled at the base, with a large sessile pod.

I have given the characters of the last of the above genera in *Paradisus Londinensis*, retaining for it, by possibly a more canonical derivation, Lamarck's name of *Podalyria*. I propose now briefly to describe the fourth, calling it after that celebrated botanic painter, who has for many years executed the figures in the *Botanical Magazine*.

EDWARDSIA.

Leguminosæ. *Juss. Gen. p.* 345.

Sect. IV. Corolla papilionacea. Filamenta 10, libera. Pericarpium 1-loculare, 2-valve. *Folia impari-pinnata. Stipulæ nullæ.*

Torus calathiformis, 10-angulus, post lapsum petalorum filamentorumque ex eorum cicatricibus mellifluus. Calyx obliquus, 5-dentatus latere superiore fisso. Petala conniventia, rectiuscula, Carinâ longâ 2-petala. Pericarpium moniliforme, 4-pterum, polyspermum. *Arbores humiles. Folia serâ hyeme decidua, juniora sericea. Flores aurei; in spicis brevibus, axillaribus,*

axillaribus, futuri anni jam æstate prodeuntibus. Bracteæ minutæ, persistentes. Genus ab affinibus toro et inflorescentiâ prorsus abludens: pericarpium consimile apud Buxb. Cent. 3. t. 47. *indicavit acutissimus* Dryander, *sed in istâ stirpe, folia videntur esse stipulata. Nomen dedi in honorem* Sydenhami Edwards, *egregii Botanici Pictoris.*

1. EDWARDSIA MICROPHYLLA.

E. foliolis 1—2½ lineas longis, suborbicularibus: carinæ petalis ellipticis, margine dorsali uncinato.

Sophora microphylla. *Jacq. Hort. Schonbr. v. 3. p.* 17. *t.* 269. Sophora microphylla. *Lam. Illustr. t.* 325. *f.* 1. Sophora Microphylla. *Sol. in Ait. Hort. Kew. v. 2. p.* 43.

Sophora tetraptera. *Forst. Prodr. p.* 32. Sophora tetraptera. *Linn. Fil. in Suppl. p.* 230.

Sponte nascentem in Ins. *New Zealand*, legit J. Banks, baronettus. Floret adhuc rarius apud nos.

2. EDWARDSIA CHRYSOPHYLLA.

E. foliolis 8—10 lineas longis, obovatis; carinæ petalis ellipticis, margine dorsali recto.

TAB. XXVI. Fig. 1.

Sponte nascentem in Insulis *Sandwich*, legit A. Menzies.

Facies aliqua sequentis, sed pubescentia dum tenera magis aurea. Folia densa: Petiolus angustus: Foliola 15—19, obovata, plus minus retusa. Flores minores quam in cæteris. Calyx tantummodo 3 lineas longus. Petala in specimine *Herbarii Banksiani*, ad quod descripsi, pallide flava.

3. EDWARDSIA GRANDIFLORA.

E. foliolis 10—15 lineas longis, lanceolatis: carinæ petalis late falcatis.

Sophora tetraptera. *Curt. in Bot. Mag. n.* 167. *cum Ic.* Sophora tetraptera. *Lamarck Illustr. t.* 325. *f.* 3. Sophora tetraptera. *J. Mill. Ic. t.* 1. pulchrâ sed insertione genitalium non fideliter depictâ. Sophora tetraptera. *Soland. in Ait. Hort. Kew. v.* 2. *p.* 43.

Sponte nascentem in Ins. *New Zealand*, legit J. Banks, baronettus.

Floret *Septembri, Octobri;* apud nos autem *Maio.*

Flores in hac specie pulcherrimi, grandes. Pericarpium omnium consimile et tetrapterum.

XXIII. *Cha-*