

Family 90. MALPIGHIACEAE

by A.J.C. Grierson

Scrambling or twining shrubs. Leaves opposite, simple, entire, pinnately veined, exstipulate. Flowers actinomorphic or weakly zygomorphic, bisexual, in axillary or terminal racemes or panicles on jointed bibracteate pedicels, 5-merous. Calyx glandular or not. Petals free, clawed or not. Stamens 10; filaments connate at base. Ovary superior, 3-lobed; styles 1 or 3. Fruit simple or mericarpic usually of 3, 1-seeded samaras.

1. Calyx with a large gland at base; style 1; fruit simple, samara with 3 radiating wings **1. Hiptage**
 + Calyx without glands; styles 3; fruit mericarpic, samaras surrounded by an oblong or suborbicular wing **2. Aspidopterys**

1. HIPTAGE Gaertner

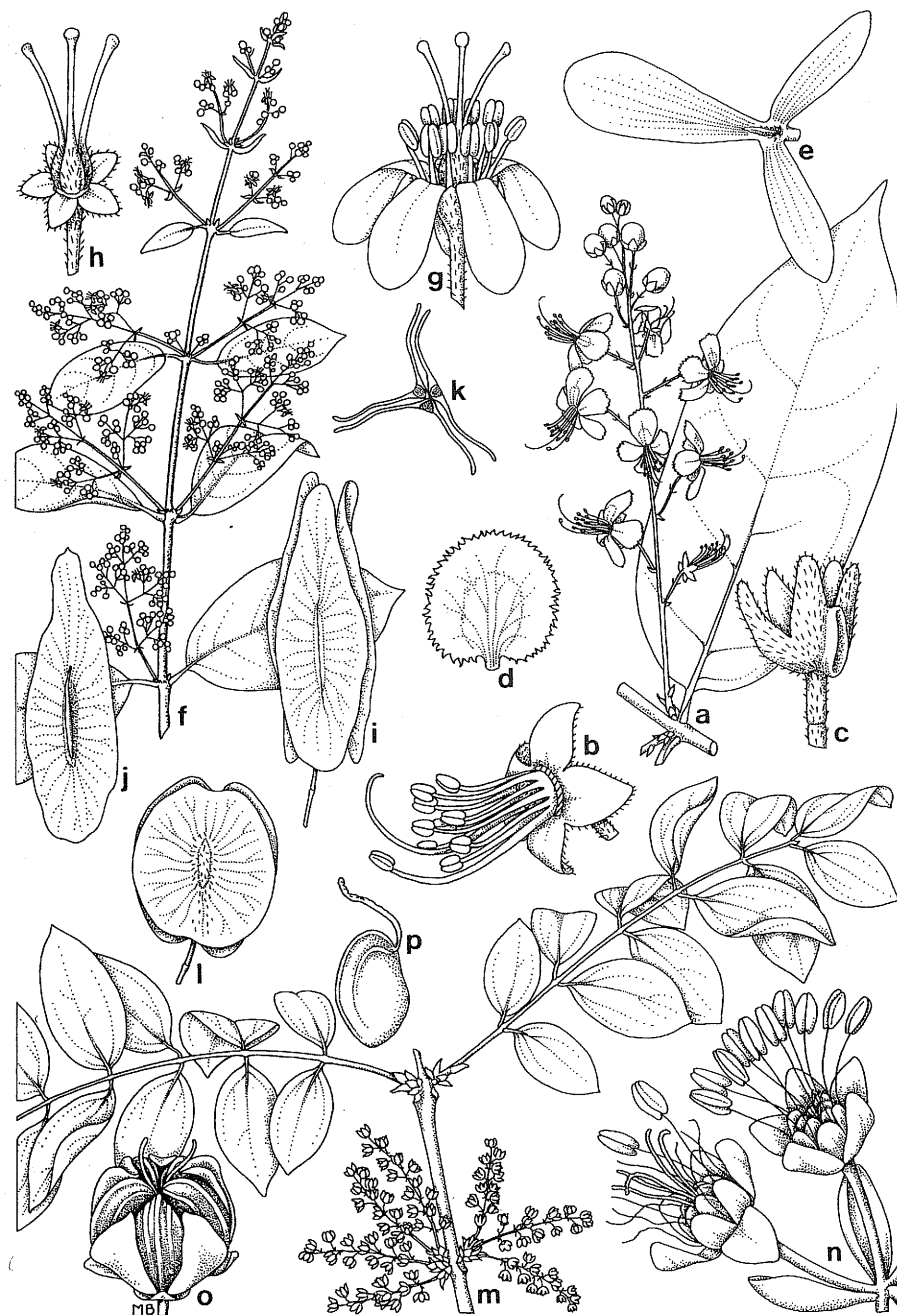
Description as for Malpighiaceae; distinguishing characters set out in key.

1. *H. bengalensis* (L.) Kurz; *H. madablota* Gaertner. Nep: *Charpate Lahara* (34), *Madhabi-lata* (34). Fig. 4a – e.

Scrambling shrub. Leaves coriaceous, ovate, 8 – 18 x 2.5 – 6.5cm, acuminate, base cuneate, glabrous. Racemes 5 – 7cm; pedicels c 7 mm; bracts narrowly lanceolate, c 2mm. Calyx with a dark oval gland, c 2 x 1mm, at base; lobes oblong, c 4 x 2mm, rounded. Petals reflexed, white; upper one yellow, elliptic, c 10 x 8mm, fimbriate, base narrowed into a claw $\pm$ as long as calyx. Stamens declinate, one longer than others, all fertile. Style upturned at end. Samaras with stiff oblanceolate wings; lateral ones c 2.5 x 1cm; central one c 3.5 x 1.75cm.

Bhutan: S – Samchi and Sarbhang districts, C – Tongsa and Tashigang districts; **Darjeeling.** Subtropical and warm broad-leaved forest slopes, 550 – 970m. March – April.

FIG. 4. **Malpighiaceae and Coriariaceae.** **Malpighiaceae.** a – e, *Hiptage bengalensis*: a, portion of flowering shoot; b, flower; c, calyx showing gland; d, upper petal; e, fruit. f – k, *Aspidopterys glabriuscula*: f, flowering shoot; g, flower; h, flower with petals and stamens removed; i, fruit; j, samara showing seed; k, t.s. fruit. l, *Aspidopterys nutans*: fruit. **Coriariaceae.** m – p, *Coriaria napalensis*: m, flowering shoot; n, two flowers; o, fruit with fleshy persistent petals; p, achene. Scale: a, f x $\frac{1}{2}$; e, m x $\frac{2}{3}$; l x $\frac{1}{3}$; i, j x 1; k x $\frac{1}{2}$; d x 2; b, c x 3; n x 5; o, p x 6; g, h x 7. Drawn by M. Bates.



2. ASPIDOPTERYS Jussieu

Description as for Malpighiaceae; distinguishing characters set out in key.

1. Leaves pubescent on veins beneath, otherwise glabrous; samaras surrounded by an oblong or oblanceolate wing longer than broad **1. A. glabriuscula**
- + Leaves whitish pubescent beneath; samaras surrounded by a broadly elliptic wing $\pm$ as broad as long **2. A. nutans**

1. A. glabriuscula Jussieu; *A. roxburghiana* sensu F.B.I. p.p. non Jussieu. Fig. 4f – k.

Twining shrub. Leaves ovate or elliptic, 5 – 9 x 3.5 – 5cm, acuminate, base rounded, pubescent on veins beneath; petioles up to 1cm. Inflorescence branches $\pm$ subumbellate; pedicels 3 – 5 mm; bracts subulate, c 1mm. Calyx oblong, c 1.5mm. Petals oblanceolate, c 3mm. Stamens erect, c 2.5mm. Samaras surrounded by a membranous wing c 3 x 1.3cm, glabrous; seed $\pm$ central.

Bhutan: S – Gaylephug district (117), C – Tongsa district (Shamgong) and Mongar district (Shongar); **Darjeeling.** Climber on warm broad-leaved forest slopes, 1500 – 1650 m. August.

2. A. nutans (Roxb.) Hook. f. Nep: *Shubung Lahara* (34). Fig. 4 l.

Similar to *A. glabriuscula* but leaves more broadly ovate, 9 – 13 x 4.5 – 11cm, acuminate, base rounded or subcordate, appressed whitish pubescent beneath; petioles up to 3.5cm; samaras broadly elliptic, c 2.5 x 2 – 2.5cm, appressed whitish pubescent.

Darjeeling: Badamtam, Sukna and Rungit and Tista Valleys. Subtropical forests, 335 – 610m. July – September.