OCHNACEAE

THE IDENTITY OF OCHNA ATROPURPUREA

In 1811 De Candolle described Ochna atropurpurea basing it on a description and plate in Plukenet's Almagestum (1694-96). He derived his epithet from the words "floribus pentapetalis, atro-purpureis". In the Almagestum it is stated that Alexander Brown collected the plant (now in the Sloane Herbarium, BM) at the Cape of Good Hope, but this seems unlikely since it does not match any of the species known from South Africa. According to Robson in Taxon 11: 49 (1962), Brown may have visited Mozambique while collecting in the Comoro Islands. This view is supported, as the Brown specimen agrees very closely with the type of a Mozambique species, Ochna mossambicensis Klotzsch, Peters s.n.

Later, in his Prodromus 1: 736 (1824), De Candolle cites both Plukenet, t. 263, fig. 1 and 2, and Burchell 4126 under O. atropurpurea DC. Subsequently all the South African material corresponding to the Burchell specimen has been referred to Ochna atropurpurea DC. The Burchell specimen from the eastern Cape, however, does not match the Plukenet figure nor the Brown specimen, but agrees very closely with the type of Ochna serrulata (Hochst.) Walp. All the South African material previously known as Ochna atropurpurea DC, should therefore be referred to O. serrulata (Hochst.) Walp.

The nomenclatural consequences are summarized below:

Ochna atropurpurea DC. in Ann. Mus. Paris 17: 412 (1811). Type: The illustration in Plukenet, Alm. 41, t. 263, fig. 1 and 2 (1694/96), based on material collected by Alexander Brown (Sloane Herbarium, BM, typotype).

O. jabotapita var. βL., Sp. Pl. 513 (1753). O. squarrosa var. βL., Sp. Pl. ed. 2: 732 (1762). O. mossabicensis Klotzsch in Peters, Reise Mossamb. Bot. 1: 88, t. 16 (1861); Robson in Taxon 11: 49 (1962); Fl. Zamb. 2, 1: 233 (1963). Type: Mozambique: Sena, Peters (B, holo†; K; PRE, photo).

For full synonymy, See Robson, 1.c. The species occurs in Kenya, Tanzania and northern Mozam-

bique.

Ochna serrulata (Hochst.) Walp., Rep. 400 (1846). Type: Natal, Natal Bay, Krauss 473 (K; PRE, photo.).

Diporidium serrulatum Hochst, in Krauss in Flora 27: 304 (1844). Type: as above.

Ochna atropurpurea sensu auct. plur. as to South

African material, non DC.

The distribution of this species extends from Knysna in the eastern Cape, through Natal to the north-eastern Transvaal.

A CHANGE IN STATUS AND A NEW NAME FOR OCHNA ATROPURPUREA VAR. ANGUSTIFOLIA

The plant described as *Ochna atropurpurea* DC. var. *angustifolia* Phill, is considered to be worthy of specific rank. When its status is raised, the epithet *angustifolia* cannot be used because of the existence of *Ochna angustifolia* Engl. & Gilg published in Bot. Jahrb. 32: 135 (1902). Therefore a new name, *Ochna gamostigmata*, has been chosen. In view of the inadequate diagnosis provided by Phillips, a full description is given here and the change in status is formally made.

Ochna gamostigmata Du Toit, stat. et nom. nov. Lectotype: Transvaal, Barberton, Upper Moodies, Galpin 963 (PRF, lecto.).

Ochma atropurpurca DC, var. angustifolia Phill. in Bothalia1: 95 (1922), non O. angustifolia Engl. & Gilg (1902).

Shrubs 0.5 1 m high, deciduous; bark rough, brown, young stems reddish-brown, lenticellate. Leaves alternate; petiolate; blade linear, lanceolate or ovate, 16-25 (-45) - 3-8 (-9) mm, acute or rounded at the apex, often mucronate, rounded or cuneate at the base, margin inconspicuously denticulate to conspicuously serrulate, lateral nerves numerous, prominent above, smooth below, tertiary reticulate venation inconspicuous, midrib prominent above, chartaceous or subcoriaceous uniformly dark green; petiole 1-1,5 mm long, sometimes slightly swollen at the base. Flowers solitary, terminating short axillary shoots up to 0.5 mm long, yellow; pedicel 6-8 (-9) mm long, articulated at the base. Sepals 5, 4-6 < 2-3 mm, green, elliptic or ovate in flower; 6-7-4-5 mm, dark ferruginous, reflexed in fruit. Petals 5,5 7 4 5 mm, rhombic or obovate, with claw 2 mm long, deciduous. Stamens numerous, irregularly arranged in a dense whorl, filaments 1-1.5 mm long, straight, anthers yellow, 2-3 mm long, dehiscing by apical pores, deciduous. Carpels 4–5, free; styles completely united; stigma capitate, lobed. Drupelets globose, $3.5-4\times3.5-4$ mm, attached at the base.

Recorded from the Natal Drakensberg, Swaziland and eastern Transvaal above 1 000 m, on loam or clayey soils; warm summers, rainfall up to 2 000 mm, frost in winter; flowering October–January.

Transvaal.—2430 (Pilgrim's Rest): The Downs, Madeira (-AA), Crundall sub PRE 32976; 17 km E. of Graskop (-DD), Codd & De Winter 3119. 2531 (Komatipoort): Shelangubu Valley, S. E. of Barberton (-CC), Pole-Evans 4680; Barberton, Upper Moodies (-CC), Galpin 963. 2630 (Bethal): Ermelo, Nooitgedacht (-CD), Pott 5096. 2730 (Vryheid): Wakkerstroom, farm Oshock (-AD), Devenish 1264.

SWAZILAND.—2531 (Komatipoort): Havelock, Mtutusiriver (CC), Compton 29126. 2631 (Mbabane): Hlatikulu (-CD), Galpin 9622.

NATAL.—2730 (Vryheid): Hlobane, forest margin at top of hill (–DB), *Du Toit* 33, 2829 (Harrismith): hills north of Bergville (–CB), *Gillett* 1188, 2929 (Underberg): Estcourt Research Station (–BB), *West* 817; Estcourt, at top of Griffin's Hill (–BB), *Du Toit* 9, 2930 (Pietermaritzburg): 22 km N,W. of New Hanover (–AB), *Codd* 1465; Karkloof, Benvie (–AD), *Medley Wood* 7813; Karkloof Falls (–AD), *Rycroft* 58.

Ochna gamostigmata differs from O. serrulata in being much smaller, under 1 m high, with smaller, narrower, acuminate rarely rounded leaves and smaller flowers. O. gamostigmata has the pedicels articulated at the base, the styles completely united and the capitate stigma lobed, whereas in O. serrulata the articulation is situated 1-3 mm above the base, the styles free and recurved at the apex for 1-2 mm, and the individual stigmas capitate. O. gamostigmata is apparently never very abundant, usually only one or two specimens being found at each locality. It occurs in a distinct habitat, namely exposed forest margins on heavy soils at an altitude of 1 000-2 000 m. In this it differs from its nearest ally, O. serrulata, which is usually found in forests on sandy or loamy soils, at altitudes below 1 000 m.

A CHANGE IN STATUS FOR OCHNA OCONNORII

Ochna arborea Burch. ex DC. var. oconnorii (Phill.) Du Toit, stat. nov.

O. oconnorii Phill. in Bothalia 1: 92 (1922); Robson in Fl. Zamb. 2: 230 (1963). Type: Transvaal, Woodbush forest, O'Connor sub PRE 1257 (PRE, lecto!).

Examination of a wide range of material in PRE reveals that *O. oconnorii* is merely a luxuriant mesophytic variety of *O. arborea* with longer, narrower, sharply serrate leaves and well developed flowering

side branches with many-flowered branchlets. The type of O. arborea was collected in the south-east Cape in sclerophyllous coastal vegetation. Its leaves are comparatively small and leathery and it is fewflowered. This typical variety is found intermingled with the more luxuriant variety along its range from the Cape to the northern Transvaal and intermediates showing characters of both taxa are frequently found.

P. C. V. du Toit