Plectranthus mzimvubuensis *Van Jaarsv.*, sp. nov., a *P. reflexo* verticillis brevibus 70–90 mm longis, tubo corollae usque ad 10 mm longo, lateribus parallelis, et staminibus tubum corollae aequantibus vel superantibus, differt.

TYPE.—Eastern Cape, 3129 (Port St Johns): near Ludonga Village, Mzimvubu River, Ecca Group shale cliffs, (–AD), *Van Jaarsveld, Xaba, Harrower & Zwide 92* (PRE, holo.).

Perennial, branched, aromatic shrub up to 1 m tall, 3 m diam., scandent and pendent from cliffs. *Roots* fibrous to slightly fleshy, but bearing distinct oblong to rounded tubers; tubers 25–50 × 14–20 mm, grey, tissue translucent and slightly yellowish. *Stems* herbaceous, semisucculent, 4-angled, terete in older branches and with a succulent basal caudex, 100 mm diam. *Bark* smooth, grey. *Leaves* thin-textured and drying chartaceous, broadly ovate-deltoid to subrotund, (15–)25–50(–75) × (20–)28–50(–60) mm, apex acuminate, with a short drip-tip, base truncate to subcordate, occasionally slightly decurrent on petiole, adaxial surface sparsely strigose becoming glabrescent, abaxial surface prominent reticulate-veined, strigose, becoming less so with age, covered with slightly sunken, translucent gland dots (sessile glandular trichomes) becoming yellowish brown in dried specimens, veins densely strigose and with similar gland dots; margin serrate-dentate with 6–10 pairs of teeth (0.5–)1–2(–4) mm long, ciliate; petiole reddish purple, 10–20(–30) mm long, finely strigose with unbranched, multicellular translucent hairs, sparsely beset with gland-tipped trichomes. *Inflorescence* short, terminal, verticillate, (30–)70–90(–120) mm long, sometimes with a pair of side branches at base; rachis sparsely strigose, bearing scattered, sessile, yellowish brown gland dots and unbranched, multicellular, glandular trichomes; bracts broadly ovate, acuminate, 7 × 4 mm. *Flowers* in sessile, 1–3-flowered cymes forming 2–6-flowered verticillasters, the latter 6–12(–18) mm apart; pedicels 5–8 mm long, finely strigose, bearing few, multicellular, gland-tipped trichomes. *Calyx* up to 4 mm long, accrescent, lengthening to 10–11 mm in fruit, densely covered with sessile, yellowish brown gland dots at base, 2-lipped; upper lip erect, broadly ovate, abruptly acuminate, ± 3 mm long; lower lip 4-toothed, teeth acuminate; tube ± 8 mm long. *Corolla* pink; tube straight, 9–10 mm long, laterally compressed, 3 mm wide, slightly deflexed forming a swollen saccate base, sparsely beset with translucent hairs, 0.2–3.0 mm long, 2-lipped; upper lip 4-lobed, 8 mm high, becoming reflexed when stigma matures; upper lobes bent forward and forming an ascending, spreading 2-spurred hood, ventral margin of upper lobes overlapping two upper margins of lateral lobes and each lobe forming a characteristic spur up to 2

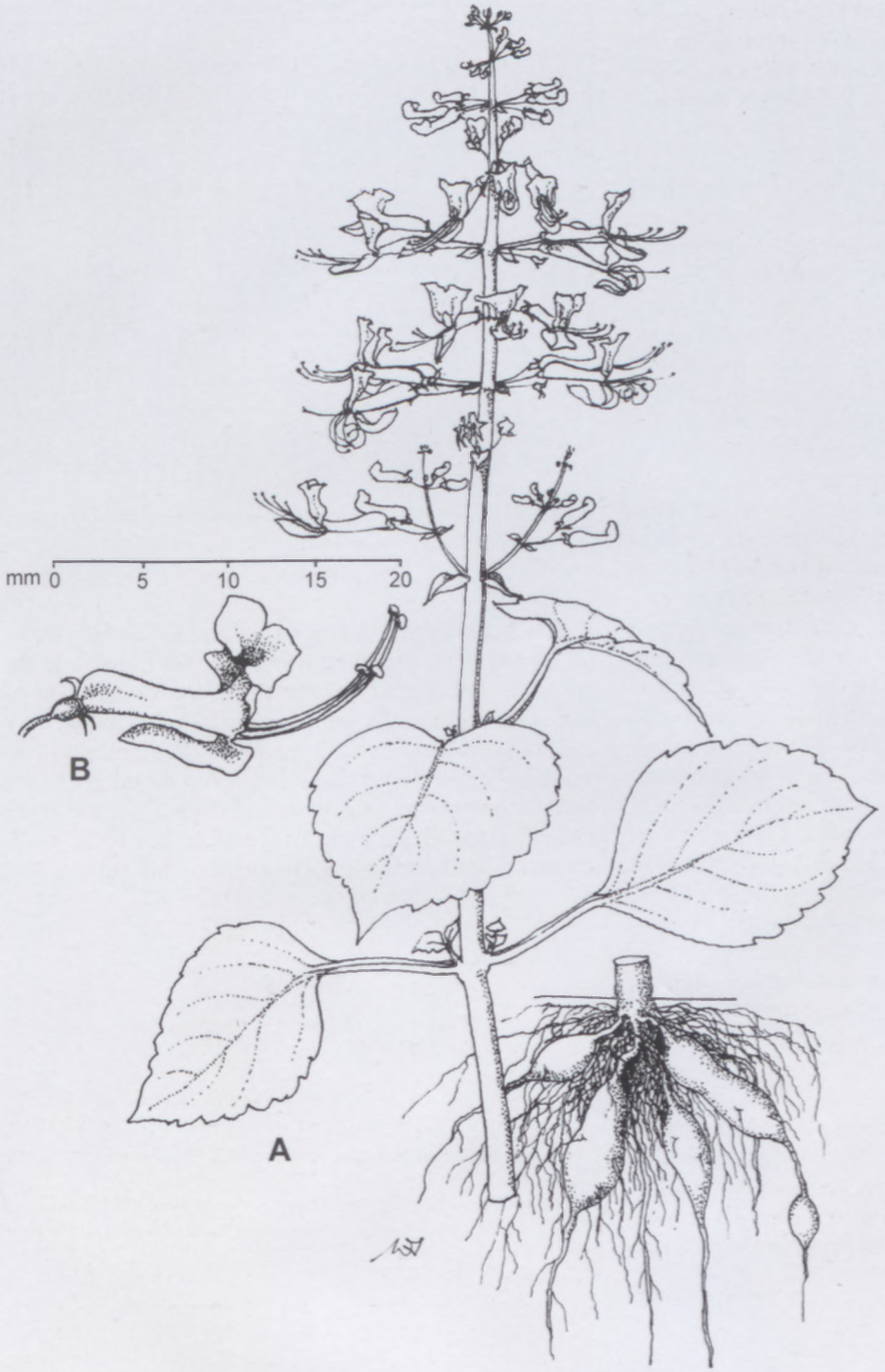

FIGURE 3.—Type specimen of *Plectranthus mzimvubuensis*: A, habit, × 0.8; B, flower. Artist: Vicki Thomas.

mm deep, apex of spur beset with translucent hairs, 0.5–1.0 mm long; lower lip boat-shaped, 6 mm long, soon becoming reflexed. *Stamens* 4, free, fused to tube ± 1.5–2.0 mm from throat, didynamous, lower pair exposed for 14–15 mm, upper pair exposed for 10–11 mm, both pairs becoming reflexed; anthers versatile; pollen cream-coloured. *Style* 14 mm long extending up to 20 mm when mature, exposed for ± 8 mm. *Nutlets* rounded, 1.5 × 1.3 mm, dark brown, smooth. *Flowering time*: autumn (March and April). Figure 3.

Plectranthus mzimvubuensis is at once distinguished from *P. reflexus* Van Jaarsv. & T.J.Edwards by its shorter parallel-sided corolla tube which is 10 mm long, whereas that of *P. reflexus* is longer, 25 mm, and constricted at the mouth. *P. mzimvubuensis* is a much-branched scrambler from a rootstock bearing distinct root tubers, whereas *P. reflexus* is an erect shrub with fleshy roots. In both species the lips and stamens become reflexed and the mature style is twice the length of the corolla tube. According to Codd's (1985) key in his treatment for the *Flora of southern Africa* (28,4: 141), the new species would key out to '28' which includes five species, *P. ambiguus*, *P. ecklonii*, *P. dolomiticus*, *P. petiolaris* and *P. laxiflorus*. Of these, the corolla of *P. petiolaris*, *P. laxiflorus* and *P. dolomiticus* are curved like a 'Dutchman's pipe'. *P. mzimvubuensis* can be distinguished from *P. ecklonii* and *P. ambiguus* by its short corolla of 9–10 mm with the lobes of the upper lips hooded, their lower margins overlapping the lateral lobes and forming two short spurs, each 2 mm long and ending in a translucent hair, 0.5–2.0 mm long. The spurred upper lobes of the corolla

are a unique feature in the genus *Plectranthus*, possibly assisting flying insects in effective pollination. The corolla tube of *P. ecklonii* is 12–18 mm long and slightly expanding to the throat, whereas the corolla tube of *P ambiguus* is 20–25 mm long.

Plectranthus mzimvubuensis is a scrambling shrub with pendent branches. It is endemic to south-facing Ecca Group shale cliff faces (Karoo Supergroup) along the Mzimvubu River, upstream from Port St Johns in Eastern Cape (Figure 4). *P. mzimvubuensis* was first collected during a rubber-boat expedition to study the cremnophilous flora of the Mzimvubu River Valley in the autumn of 2002. The Mzimvubu River, after which this species is named, is the largest river in the Transkei portion of Eastern Cape. The Xhosa name *Mmzimvubu* means 'the home of the hippopotamus' (*Hippopotamus amphibius*), but these animals were wiped out in the area more than a century ago. The new species was encountered below Ludonga Village, about 40 km from the river mouth, at an altitude of ± 600 m. The vegetation consists of savanna and the rainfall occurs mainly from spring to autumn, 800–1 000 mm per annum. The climate is subtropical, with hot summers, dry, sunny, frost-free winters and cool evenings. The population of *P. mzimvubuensis* was encountered on a south-facing cliff in light shade, together with other succulent plants such as *Adromischus cristatus*, *Bulbine natalensis*, *Crassula cordata*, *C. cultrata*, *C. multicava* subsp. *floribunda*, *C. orbicularis*, *Cyanotis speciosus*, *Delosperma tradescantioides* and *Peperomia blanda*. Trees and shrubs in the area include *Bauhinia bowkeri*, *Celtis africana*, *Ficus burkei* and *Euphorbia tirucalli*. Cuttings taken from *P. mzimvubuensis* rooted rapidly and are grown at Kirstenbosch National Botanical Garden.

Although only a small population of the new species was found, no threats seem to exist on or near the cliff face and the species is expected to be more common in similar habitats elsewhere in the river valley. Its present conservation status is classified as Rare, but not threatened.

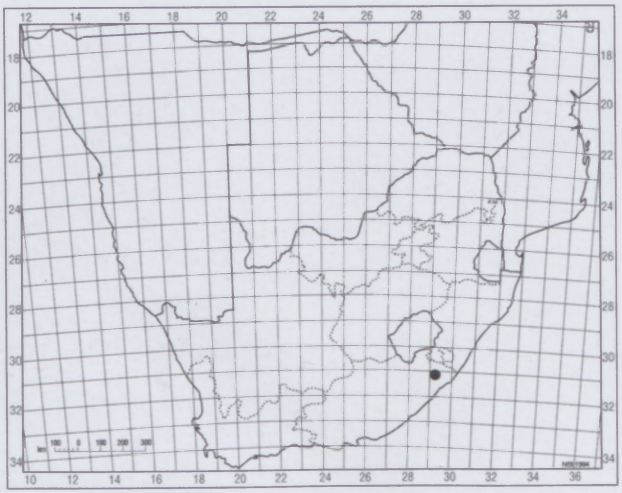

FIGURE 4.—Known distribution of *Plectranthus mzimvubuensis*.

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