raised below; petioles 0.8-8 cm long. Racemes up to 33 cm long, turning black when dry; whorls close; bracts 1.4 mm long, linear; bracteoles 1.2 mm long, linear; pedicels ± 1 mm long, slender. Calyx 4.5-5.5 mm long, tubular, slightly narrowed towards base; teeth 5, subequal, broad at base, narrowed towards the tip, hisrate within. Corolla 7-8.5 mm long, greenish pale yellow, subbilabiate, closely veined; upper lip 3-lobed, lateral lobes rounded, sparsely pubescent without, the middle acute, pubescent without; lower lip entire, acute, glabrous. Stamens 4, each 0.8-1.1 cm long, exserted, subequal; filaments of two stamens attached to the upper lip bearded with white hairs at base; anthers reniform. Disc subentire. Ovary 4-partite, glandular; style 0.8-1.3 cm long, filiform; stigma bifid. Nutlets 4, each 0.8-1 mm long, rounded on one side, angled on the other, black with a few deciduous glands. (Figs. 1-7).

Holotype, Shetty & Vivekananthan 33420 A

(Lower Vagavurrai, Devicolam, Kerala, South India, 1800 m, 5-2-1970) has been deposited in the Central National Herbarium, Calcutta (CAL); isotypes Shetty & Vivekananthan 33420 B-Z and paratypes Shetty & Vivekananthan 27370 A-F (same locality, 25-4-1966) have been deposited in the Regional Herbarium, Botanical Survey of India, Coimbatore (MH).

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TWO NEW GRASSES FROM MARATHWADA

During the course of studies on the grass flora of Marathwada region on the Deccan Plateau of India, two species revealed to be new to science. These are described in the present paper.

**Isachne bicolor** Naik et Patunkar spec. nov.

Herba annua decumbens, 30-45 cm alta; culmus laevis; nodi glabri, pilosi. Folia 35-45 × 3-7 mm, anguste ovato-lanceolata, utraque facie capillis bullatis tecta; nervi 11-15 utraque costae parte fere distincti; margines integrae vel serrulatae, cartilagineae; vagi nae pilosae vel in medio glabrae, superiores vero marginibus exceptis glabrae. Panicula anguste effusa, 2-5 cm longa; rami adscendentes, inferiores 1-1.5 longi. Rami et pedicelli filiformes vittis luteis glandulosis. Spiculae late ovatae, 2.75-3.25 mm. Glumae fere orbicularae, apiculatae vel non, 2.5-3 mm diam., glabrae vel dorso capillis bullatis, 5-9-nervae. Flosculi similes, lemmod bicolorata, dorso dense pilosa, 2.25-2.5 mm diam., con cave. Palca bicarinata, fere complete lem matibus tecta.

*I. kinabaluensis* Murr. simillima sed foliis conspiciue nervatis et capillis bullatis tectis, spiculis longioribus, glumis pilosis, le mmatio bus bicoloratis et omnino pubescentibus differt.

Patunkar 1849 A (Typus) et B-E (Isotypi) lectus in Mhasimal plateau, Aurangabad die 8-10-1973, positi in herbario Marathwada University, Aurangabad.

**Isachne bicolor** Naik et Patunkar spec. nov.

Decumbent annual 30-45 cm tall; culms smooth; nodes glabrous or pilose. Leaves
35-45 × 3-7 mm, narrowly ovate-lanceolate, covered on both surfaces with bulbous-based hairs; nerves 11-15 on either side of the midrib, rather conspicuous; margins entire or serrulate, cartilagenous; sheaths covered with hairs or glabrous in the centre, upper usually glabrous except at the margins. Panicle narrowly effuse, 2.5 cm long; branches ascending, the lower ones 1-1.5 cm long; cular, apiculate or not, 2.5-3 mm in diam., glabrous or with bulbous-based hairs all over the dorsal surface, 5-9-nerved. Florets similar; lemmas bicolourous, densely hairy on the back, 2.25-2.5 mm in diam., concave. Palea 2-kkeeled, nearly entirely enclosed by the lemmas.

Very similar to I. kinabaluensis Murr. from Burma but differs in having leaves with rather conspicuous nerves and covered with bulbous-based hairs, longer spikelets with hairy glumes and bicolourous lemmas that are pubescent all over.

This species has been collected from the Mhaismal Plateau in Aurangabad district where it grows in wet situations in association with Coix aquatica Roxb., Echinochloa colonum (Linn.) Link, various members of the Cyperaceae and other hygrophytes.

**Tripogon polyanthus** Naik et Patunkar spec. nov.

Gramen perenne et dense caespitolum, 6-8 dm altum; stolon brevis, crassus, radicibus fibrosis et longis. Folia 30-75 × 2-3 mm, convoluta, glabra; vaginae laeves, glabrae; ligulac membranaceae. Racemi spiciformes 15-18 cm longi; rhachides laeves. Spiculae 2-6.5 cm longae, densae, erectae vel adscendentes, 40-50 vel magis floribus. Flosculi inferiores subsessiles, superiores breviter pedicellati; rhachillae articulus 1/3 vel paulo quam lemmata longior; callus pilosus. Gluma inferior 3-3.25 mm longa, 1-nervis, anguste lanceolata, caudato-acuminata, lateribus inequalibus. Gluma superior 4-4.5 mm longa, 1-nervis, lineari-lanceolata, lateribus aequalibus. Lemma ovato-lanceolatum, 5.5-25 mm longum (arista inclusa), 2.25 mm latum, apice duobus lobis acutis. Arista 1-1.25 mm longa, e sinu capillacea. Palea 4-4.25 × 1.1-2.5 mm, obovato-lanceolata, 2-carinata; carinae breviter pilosae.

**T bromoidi** Roth affinis sed spiculis longioribus, magis florescentibus, laxioribus, stramineis et lemmatuibus apice bilobatis differt.

Patunkar 1859A (Typus) et isotypi B-E lec.

Tus in Daulatabad die 18-10-1973, positi in herbario Marathwada University, Aurangabad.

Tripogon polyanthus Naik et Patunkar spec. nov.

Densely tufted perennial, 6-8 dm tall; stolon short, stout with long fibrous roots. Leaves 30-75 x 2-3 mm, convolute, glabrous; sheaths smooth, glabrous; ligule membranous. Raceme spiciform, 15-18 cm long; rachis smooth. Spikelets 2-6.5 cm long, 40-50 or more flowered, dense, erect or ascending. Lower florets subsessile, upper shortly pedicelled; joint of the rhachilla 1/3 or slightly longer than the lemmas; callus hairy. Lower glume 3-3.25 mm long, one-nerved, narrowly lanceolate, caudate-acute, sides unequal. Upper glume 4-4.5 mm long, one-nerved, linear-lanceolate with equal sides. Lemma ovate-lanceolate, 5.5-25 mm long (including awn) and 2.25 mm broad, two-lobed at apex; lobes acute. Awn 1-1.25 mm long, capillary from the sinus.

Palea 4.25-5 x 1-1.25 mm, obovate-lanceolate, 2-keeled; keels shortly hairy.

Near to T bromoides Roth but differing in having much longer many-flowered spikelets which are rather divaricate, more loose and straw-coloured and the lemmas 2-fid at apex.

This species is generally found growing in open situations along dry stream-banks in association with Aristida funiculata Trin. & Rupr., Eragrostis sp. and other grasses of the drier localities.

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