



# ***Apocoris collinus (Poaceae)*, a new record for India from Nicobar Islands, Andaman & Nicobar Islands**

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## **एपोकोपिस कोलिनस (पोएसी), निकोबार, अंडमान एवं निकोबार द्वीपसमूह से भारतीय वनस्पतिजात में नवीन अभिलेख**

रेशमा लकड़ा एवं पुष्पा कुमारी

### **सारांश**

एपोकोपिस कोलिनस बालनसा को भारतीय धारों में निकोबार द्वीप, अंडमान एवं निकोबार से प्रथम बार अभिलेखित किया गया है। वंश एपोकोपिस को प्रथम बार ही अंडमान एवं निकोबार क्षेत्र से अभिलेखित किया गया है। प्रस्तुत शोध में इस जाति का विविध आकारिकी वर्णन, छायाचित्रण के साथ वैश्विक वितरण भी प्रस्तुत किया गया है।

### **ABSTRACT**

*Apocoris collinus* Balansa is reported as an addition to the grass flora of India from Nicobar Islands and the genus *Apocoris* is reported first time from Andaman & Nicobar region. The paper embodies vivid morphological description, photographic plate along with world distribution.

**Keywords:** Andaman & Nicobar Islands, *Apocoris*, New Record, Poaceae.

## **INTRODUCTION**

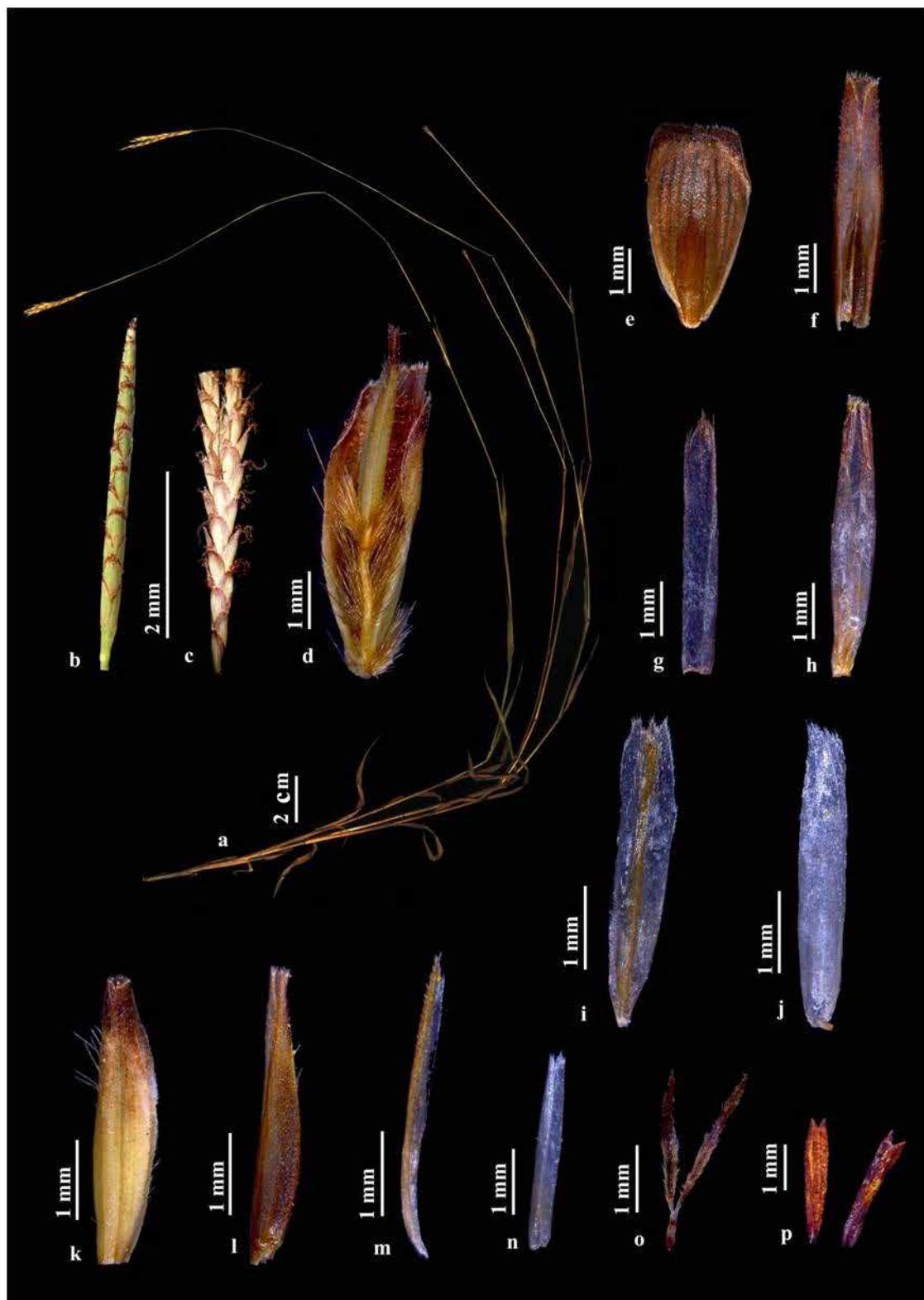
The genus *Apocoris* Nees (Poaceae) belongs to subfamily Panicoideae, tribe Andropogoneae, subtribe Germainiinae (Soreng & al., 2017). 16 species are distributed in Tropical Asia (Indian Subcontinent to S. China and Malaysia) (Powo 2019). In India, it is represented by 5 species (Bor, 1960; Sur, 1988; Kabeer & Nair, 2009) and interestingly, this species is not reported from India (Murugan & al., 2016; Kellogg & al., 2020).

This interesting specimen of *Apocoris* was collected while exploring the grasses of Andaman and Nicobar Islands. After critical study of the specimens and perusal of relevant literature, it is revealed that the specimen belongs to *A. collinus* Balansa, a species distributed in Borneo, Sulawesi, Sumatra, Thailand and Vietnam (Bor 1952; Watson & Dallwitz 1992; Powo 2019). Hence, this is the first report for India and the genus for Andaman and Nicobar Islands. A brief description along with photo plate is provided for easy identification.

## **TAXONOMIC TREATMENT**

***Apocoris collinus*** Balansa in J. Bot. (Morot), 4: 84. 1890.  
***A. borneensis*** Ridl. in Bot. Jahrb. Syst. 44(5): 519. 1910.

Perennial. Culm 40–55 cm long, dense; node glabrous; internodes 3–9.5 cm long, terete, glabrous. Leaf blade 3.5–6 × 0.25–0.3 cm, linear-lanceolate, apex acute, densely tuberculate hairy on both surfaces; hairs 0.2–3 mm long, white; margins denticulate; ligule membranous, 0.5–0.6 mm high, margins fringed; sheath 2.5–5 cm long, densely hairy towards upper portion, reduced towards basally. Inflorescence a raceme, 1 or 2, compressed, 3–5 cm long; peduncle 8–15 cm long, exserted. Spikelets in pair, sessile (fertile) and pedicelled (sterile); callus hairy. Sessile spikelet 4–5 × 1.5–2 mm, oblong, apex praemorse, base attenuate, hairy upwards; florets-2. Lower glume 3.8–4.2 × 0.9–1.5 mm, broadly oblong, broad towards upper; apex praemorse, apical margin ciliolate; base attenuate; coriaceous, 7–8 nerved;



*Apocoris collinus* Balansa: a. Habit; b. Inflorescence (young); c. Inflorescence (mature, dry); d. Spikelets in pair; Sessile spikelet. e. Lower glume; f. Upper glume; g. Lower lemma; h. Lower palea; i. Upper lemma; j. Upper palea; Pedicelled spikelet. k. Lower glume; l. Upper glume; m. lemma; n. Palea; o. Gynoecium; p. Anthers.

dorsal surface near to margins covered with 0.1–2 mm long hair or glabrous; reddish brown on apical part; margins faintly ciliolate. Upper glume  $3.8\text{--}4.2 \times 0.6\text{--}0.8$  mm, linear-lanceolate; apex praemorse, apical margin ciliolate; base attenuate; chartaceous, 3-nerved, dorsal surface pubescent, densely pubescent towards lower, golden brown; margins ciliolate, incurved from lateral veins to margins. Lower lemma  $4\text{--}4.2 \times 0.8\text{--}1$  mm, elliptic-lanceolate; apex uneven, apical margin ciliolate; hyaline; glabrous; margins ciliolate, open. Lower palea  $3.8\text{--}4.6 \times 0.4\text{--}0.5$  mm, linear-lanceolate; apex praemorse, apical margin ciliolate; hyaline; 2-keeled, keels with minute hair; glabrous or rarely minutely hairy; margins infolded, ciliolate from middle to apex. Anthers 2,  $2\text{--}2.2 \times 3$  mm, brownish-yellow or blackish-brown; filaments  $0.5\text{--}0.6$  mm long. Upper lemma  $3.5\text{--}4 \times 0.4\text{--}0.8$  mm, oblanceolate; apex acuminate to trilobed; apical margin ciliolate; hyaline; mid-nerve broad; surface glabrous; margins ciliolate towards middle to apex, open. Upper palea  $3.3\text{--}5 \times 0.5$  mm, ligulate; apex praemorse, apical margin ciliolate; hyaline; glabrous; margins ciliolate from middle to apex. Ovary  $0.3\text{--}0.4$  mm, oblong, golden-brown; style 2,  $1\text{--}1.2$  mm long; stigma 2,  $3\text{--}5$  mm long, plumose, golden brown. Pedicelled spikelets  $3\text{--}4 \times 0.2\text{--}0.3$  mm, lanceolate, apex praemorse, surface hairy; pedicel adnate at the base to lower glume of sessile spikelet, hairs upto 2.5 mm long towards upper and short hairy towards base; callus hairy. Lower glume  $3.2\text{--}3.5 \times 0.4\text{--}0.6$  mm, lanceolate; coriaceous, apex praemorse, apical margin ciliolate; 4–5-nerved, surface with hair towards upper. Upper glume  $3\text{--}3.2 \times 0.3\text{--}0.4$  mm, lanceolate, compressed; apex praemorse, apical margins ciliolate; chartaceous; scabrid, with few long hairs on mid-vein; mid-vein keeled. Lemma  $2.8\text{--}2.9 \times 0.2$  mm, oblanceolate; apex trilobed, apical margin scabrid; membranous to hyaline; glabrous; mid vein only, keeled, brown, margins entire, open. Palea  $2.4\text{--}2.5 \times 0.3\text{--}0.5$  mm, lanceolate; hyaline, apex praemorse, apical margin ciliolate; margins entire, infolded.

*Flowering and fruiting:* November–April.

*Habitat and ecology:* Grows on grasslands of Teressa Island, Nicobar Islands with common associated grass species like *Paspalum longifolium* Roxb., *Sorghum halepense* (L.) Pers. and other seasonal grasses.

*Distribution:* India (Teressa Island, Nicobar group of Island), Borneo, Sulawesi, Sumatra, Thailand and Vietnam.

*Specimen examined:* India, Andaman & Nicobar Islands, Nicobar Islands, Teressa Island, 23.11.2018;  $08^{\circ} 14' 53.1''\text{N}$ ;  $93^{\circ} 08' 36.1''\text{E}$ , Reshma Lakra 32801 (CAL) and (PBL).

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