

### Short Communication

#### Exploration and Collection of *Porteresia coarctata* (Roxb.) Tateoka from Orissa Coast, India

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*Porteresia coarctata* (Roxb.) Tateoka formerly known as *Oryza coarctata* (Roxb.) has recently attracted the attention of rice researchers for its tolerance to soil salinity. This species is grown in estuaries and tidal swamps in the deltas of rivers in India, Bangladesh, Pakistan, Burma and Malaysia. In India, it has been reported from the states of Karnataka, Tamilnadu, Orissa and West Bengal. With a view to collect, conserve and evaluate the genetic diversity of this species, the delta region of Baitarani and Brahmani rivers of Orissa (India) were explored.

#### Geographical location and habitat

The explored area is known as Bhitarkanika and is the deltaic region of the confluence of rivers Brahmani, Baitarani and Dhamra. The area is located between 20°04' and 20°08' north latitude and 86°45' and 87°05' east longitude. The species grows in the muddy banks of the ramifying creeks, channels and distributaries of these rivers. Vast stretches of this species were seen in the zone that gets submerged during high tides. The associated grass species were *Myriostachya whitiana* (Nees ex Steud.) Hookf. and *Cyperus exaltatus* Retz. The vegetation on the banks was typical mangrove as noticed from the species *Xylocarpus granatum* Koen., *Kandellia candel* (Linn.) Druce, *Aegiceras corniculatum* (Linn.) Blanco, *Sonneratia petala* Buch.-Ham and *Rhizophora mucronata* Peir, with predominance of crocodiles amidst the thickest of this grass.

#### Collection

The habitats were explored during November 1987 when flowering period of this species was almost over and the spikelets were mostly shed. The plant height, culm diameter, leaf length and width, exertion, panicle length, and length and width of spikelets were measured (Table 1). The soil was collected from the habitat of the species and tested for its electrical conductivity and pH which were found to be 4.61 mmhos and 7.0, respectively.

The sprouting plants as well as adult plants along with their rhizomes were collected and brought to the CRRI Campus, Cuttack and were potted. All these plants, withered and appeared to be dead. However, fresh plantlets appeared from the underground rhizomes and soon got established.

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TABLE 1. VARIABILITY WITHIN *Porteresia coarctata* (Roxb.)

Character (unit)	Mean	Range
Plant height (cm)	86.10	70-110
Leaf length (cm)	43.30	38.6 -47.5
Leaf width (cm)	0.83	0.7 - 0.9
Flag leaf length (cm)	14.92	11.0 -18.8
Flag leaf width (cm)	0.41	0.35- 0.45
Culm diameter (cm)	0.34	0.3 - 0.4
Panicle length (cm)	17.90	16.3 -19.5
Exsertion (cm)	0.94	0.2 - 1.6
Spikelet length (cm)	1.20	1.1 - 1.3
Spikelet width (cm)	0.30	0.2 - 0.3
Glume length (cm)	0.53	0.4 - 0.7
Grains per panicle (nos)	25.20	15.0 - 36
Spikelet sterility (%)	40.74	27.7 - 46.8