

## ***Pedaliium Murex* L. (Pedaliaceae) – A New Record of Purba Medinipur District to the State Of West Bengal**

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**Abstract:** The present paper reflects on the new report of *Pedaliium murex* L. in Coastal area of Purba Medinipur, West Bengal, It also delas withent taxonomy and shrot ecology for the same to develop further research in different fields. This is due to the potential use of medicinal purpose of the same species. A total thwelve species of different taxa are available in the same area along with highest abundane value is prented here.

**Keywords:** *Pedaliium murex* L., Taxonomy –ecology, Uses, Purba Medinipur District.

### **I. Introduction**

While collecting the material from Basantia and Chalti village of Contai Sub-division, Purba Medinipur district, West Bengal, an interesting species from Pedaliaceae was noticed along the *sal* (*Shorea robusta*) dominant vegetation in Coastal area near Bay of Bengal. After critical study of literature and herbarium (CAL) it has now been confirmed as *Pedaliium murex* Royen ex L. Perusal of literature and herbarium revealed that there are several specimens and records of this specific taxon collected and housed from different districts of the states of India except the aforesaid district. Study from the distributional pattern of *Pedaliium murex* it is interesting to note that this species is extending its limitation to Eastern Part of India through West Bengal along coastal path. A short description and ecology has been provided for easy identification and further study. Ecologically it is significant because it is a good san binder as well as good colonizer for climax formation. Further work on seed germination, ecology in details, anatomy, morphology, ethnobotany and pharmacognostic study are in progress. Not only had the significant role mentioned earlier, it is noticed that it has got good medicinal properties (Watt; 1832, 1889-1893, Kirtikar and Basu; 1933, Balamurugan *et al.*, 2010, ). *Pedaliium murex* Royen ex L. Syst. Ed 10: 1123, (1759); Hook.f; Fl. Brit. India, 4: 386, 1882; Haines; Bot. Bihar & Orissa, 2: 692. 1922; Roxb. Fl. Ind. 3:114. 1832; Wight Ic. T-1615, 1841; Dalz. & Gibbs. Bomb. Fl. I: 62. 1861

### **VERNACULAR NAMES:**

Eng.-Land Cattrops; Sans.-Brihat gokshru; Beng.-Baraghokru/Barogokhur; Hindi-Gokhru/Bada gokshru; Kadvagokhru; Mar.-Hatticharatte, mothe-gokharu; Guj.-Motto-gokharu, Kadvaghokru; Tel.-Enugupalleru, Pedda palleru; Tam.-Anainerinji, Peru-nerunji; ananerinni; Oriya-Gokara, gokshur; Pan.-Gokru kalan.

### **DESCRIPTION OF THE SPECIMENS:**

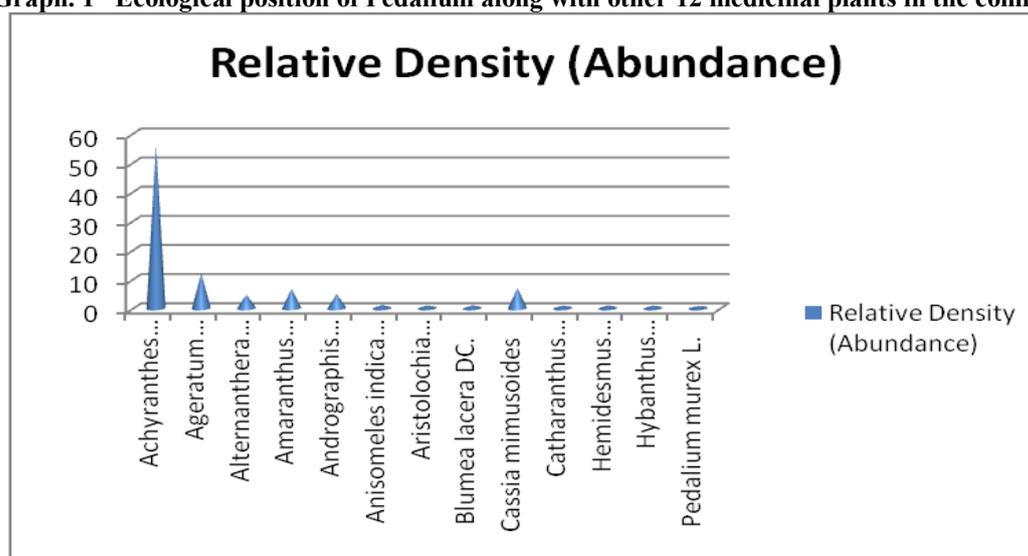
A fleshy diffuse herb ca. 7.5-30 cm high with ascending branches. Roots white, 10-15 cm long having sweet aroma. Leaves repandentate, alternate, 3.2-5.3 cm x 1-2.7 cm. Inflorescence axillary, terminal. Flowers pedicillate with 2 curious button shaped glands at insertion, crimson to yellow, ca. 2.2 – 3.4 cm long. Calyx deeply 5 lobed, corolla faint to deep yellow, tubular, lobes round; stamens 4, didynamous, included, anther cells ovate, parallel, separate, pendulous. Fruitsh are 5-12 compartmental and each having seed.

**ECOLOGY:** This species is found along with other 12 species of herbs in the sandy area of coastal belt of Purba Medinipur . The relative density based abundance (RD) of the species was 0.8 while highest abundance value was observed in case of *Achyranthes aspera* L. (RD=56) followed by *Ageratum conyzoides* L (RD=12). Other species of medicinal importance was observed in the said area are *Alternanthera sessilis* DC. (4.8), *Amaranthus spinosus* L. (RD=6.9), *Andrographis paniculata* (Burm. F.) Wall. ex Nes (RD=5.0), *Anisomeles indica* (L.) Ktze. (RD=1.2), *Aristolochia indica* L. (RD=1.0), *Blumea lacera* DC. (RD=1.1), *Cassia mimusoides* (RD=7.0), *Catharanthus roseus* (L.) G.Don. (RD=1.0), *Hybanthus enneaspermus* (L.) F. Muell. (RD=1.0) and *Hemidesmus indicus* R. Br. (RD.6=1 ) Table-1 and Br graph 1.

**Table-1. Relative Density of Species in the study area for Ecological Status of Plants**

Sl. No.	Name (s) of the species	Relative Density (Abundance)	Parts Used
1.	<i>Achyranthes aspera</i> L.	56.0	Whole Plant
2.	<i>Ageratum conyzoides</i> L.	12.0	Leaves
3.	<i>Alternanthera sessilis</i> DC.	4.8	Leaves
4.	<i>Amaranthus spinosus</i> L.	6.9	Whole plant
5.	<i>Andrographis paniculata</i> (Burm. F.) Wall. ex Nees	5.0	
6.	<i>Anisomeles indica</i> (L.) Ktze.	1.2	Leaves
7.	<i>Aristolochia indica</i> L.	1.0	Roots
8.	<i>Blumea lacera</i> DC.	1.1	Leaves
9.	<i>Cassia mimusoides</i>	7.0	Seeds
10.	<i>Catharanthus roseus</i> (L.) G.Don.	1.0	Leaves
11.	<i>Hemidesmus indicus</i> R. Br.	1.0	Roots
12.	<i>Hybanthus enneaspermus</i> (L.) F. Muell.	1.0	Whole Plant
13.	<i>Pedaliium murex</i> L.	0.8	All parts
	Total 13Species	98.8	

**Bar Graph. 1 Ecological position of Pedaliium along with other 12 medicinal plants in the community**



**FLOWERING PERIOD:** May to December.

**FRUITING PERIOD:** June to January.

**DISTRIBUTION:**

This is a monotypic species. INDIA- Delhi, Rajasthan, Uttar Pradesh, Punjab, Kerela, Karnataka, Tamil Nadu, Andhra Pradesh, Orissa, Diu Island; TROPICAL AFRICA, SRI-LANKA, MEXICO.

**USES:** The mucilaginous infusion so formed with demulcent, diuretic, and tonic properties and use in the diseases of the urino-genital system, such as gonorrhoea, dysuria, etc. It is said to dissolve calculi. The leaves are applied to ulcers and a decoction of the roots is said to be antibilious. In market and local market ripened fruits are marketed for ayurvedic value.

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