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Floristic Studies of Kaviti Mandalam, Srikakulam District, Andhra Pradesh

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ABSTRACT

The paper deals with general floristic account of Kaviti Mandalam, Srikakulam district, Andhra Pradesh. A brief description of vegetation and topography is given. 360 Species belonging to 267 genera and 100 families are enumerated, of which 9 species belonging to Pteridophytes. Fabaceae, Euphorbiaceae, Asteraceae, Poaceae, Rubiaceae, Malvaceae, Apocynaceae are the dominant families. Nearly forty species are newly added to the District Flora.

Keywords: Floristic studies, Kaviti, Srikakulam

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INTRODUCTION

Kaviti Mandalam, the north-east part of the 38 mandals of the Srikakulam district of Andhra Pradesh state is lies between $18^{\circ}.48' - 19^{\circ}10' N$ and $84^{\circ}35' - 84^{\circ}45' E$ and bounded by Ichapuram Mandalam on the North and Bay of Bengal in east and Orissa state and Kanchili Mandalam in west and Sompeta Mandalam in the south (Fig.1). Total area of the mandal is 117.99 Sq.Kms. Most part of the area (5020 Hectares) is occupied by Coconut plantation. The total forest area in the mandalam covers 914 Hectares. Floristic diversity is rich in this area. It was found to be interesting and disclosed a good amount of plant wealth. Few workers have been worked on the floristic studies on Srikakulam district [4-6]. So far no one could worked on Kaviti mandal in detail.

MATERIAL AND METHODS

The exploration of the area under study includes the planned field trips to the various places for plant collection. The study was carried out during the period of 2008-2010. Several field trips have been made to cover the various villages of kaviti mandal. Each field trip includes 2-3 days covering a particular area. The plant specimens were collected in both vegetative and reproductive stages. After collected the plant material herbarium was prepared.

The specimens were identified by comparing with the authentic certified specimens at the Andhra University herbarium, Department of Botany. Later these identifications were checked again in the laboratory with the help of floras, Monographs and other relevant literature, the correct name was provided to each plant. Each plant was critically studied and identified using the 'Flora of British India' [2, 3]. The grasses of Burma, Ceylon, India and Pakistan [1, 5, 7] and district floras of Vizianagaram [6, 8, 9] and Visakhapatnam. Weed Flora of North Coastal Andhra Pradesh [4]. As far as possible, the correct and currently accepted botanical names were used.

RESULTS

In the present study, a total of 360 plant species, belonging to 267 genera and 100 families were identified in Kaviti Mandalam, Srikakulam District, Andhra Pradesh. Of these 360 species, 328 are dicots, 23 are monocots and 9 pteridophyte. The taxonomic categorization of species is presented in table-1

Families and genera

The total families recorded in the present study are 100 (Table-1). The first 12 largest families more than 8 species are presented in Table 2. Fabaceae is the largest representing 35 species. Euphorbiaceae occupies the second position with 20 species followed by Asteraceae (16), Rubiaceae and Malvaceae (15) each, pocynaceae (13), Acanthaceae and Amarantaceae (11) each, Caesalpinaceae, Convolvulaceae, Asclepiadiaceae and Verbenaceae (8) each.

Table 1: ANALYSIS OF SPECIES Kaviti Mandalam

S.No	TRADITIONAL PLANT GROUP	FAMILIES	GENERA	SPECIES
1	Dicots			
	i) Polypetalae	45	116	157
	ii) Gamopetalae	20	88	119
	iii) Monochlamedeae	13	35	52
2	Monocots	17	22	23
3	Pteridophytes	5	6	9
		100	267	360

Table 2: LARGEST FAMILIES OF Kaviti Mandalam

S.No	Name of the family	No of Genera	No of Species
1	Fabaceae	21	35
2	Euphorbiaceae	10	20
3	Asteraceae	16	16
4	Rubiaceae	9	15
5	Malvaceae	8	15
6	Apocynaceae	10	13
7	Acanthaceae	8	11
8	Amaranthaceae	8	11
9	Verbanaceae	7	8
10	Asclepidiaceae	6	8
11	Convolvulaceae	4	8
12	Ceasalpinneaceae	4	8

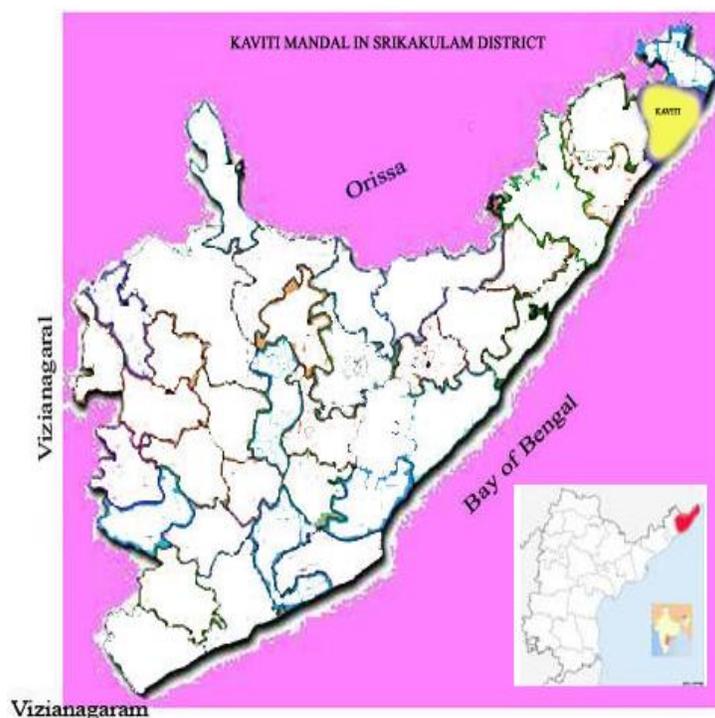


Fig.-1: Showing the study area



DISCUSSION

No attempt has been made so far to make a detail study on the floristic studies of Kaviti mandal except a few reports [4-6]. In the present study a total of 360 plant species, belonging to 267 genera and 100 families were identified. Of these 360 species, 328 are dicots, 23 are monocots and 9 pteridophyte. Particularly in Rajapuram and Putiyadala villages the Pteridophytic flora is luxuriant due to the abundant growth of coconut plantations; it was not reported by the earlier workers.

CONCLUSION

All the data contained in the paper are quite authentic based on extensive field collections for more than 3 years is presented as Floristic Studies of Kaviti Mandalam, Srikakulam District, Andhra Pradesh for the first time. It would be of good source of information of technical and taxonomic data to the academic institutes and research organizations like Colleges, Universities, Regional research laboratories and other agencies.

REFERENCES

- [1] Bor NL. The Grasses of Burma, Ceylon, India and Pakistan. Peragmon Press, Oxford 1960.
- [2] Gamble JS and Fischer CEC. (1915-35) Flora of the Presidency of Madras. London (repr. ed. 1957, Calcutta).
- [3] Hooker JD et al. (1872-1897) Flora of British India. 7 Vols. London
- [4] Prayaga Murty P. Studies on Weed Flora of Crop fields of North Coastal Andhra Pradesh, India. Ph.D. thesis, Andhra University, Visakhapatnam 2009.
- [5] Pullaiah T and Chennaiah E. Flora of Andhra Pradesh, India. Vol J. Scientific Publishers, Jodhpur 1997.
- [6] Rao RS and Hara Sreeramulu S. The flora of Srikakulam district, Andhra Pradesh, India. Meerut 1986.
- [7] Reddy RD, Prasad MK and Venkaiah K. Forest flora Andhra Pradesh (Vernacular names) Hyderabad 1991.
- [8] Subba Rao GV and Kumari GR. Flora of Visakhapatnam District, Botanical Survey of India 2002.
- [9] Venkaiah M. Studies on the vegetation and flora of Vizianagram district, Andhra University, Visakhapatnam 2004.