IN VITRO MASS PROPAGATION OF ANDROGRAPHIS LINEATE NEES. THROUGH NODAL EXPLANT- AN IMPORTANT ETHNOMEDICINAL PLANT.

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ABSTRACT

In this present investigation, in vitro mass propagation was successfully achieved using developed through nodal segments of Andrographis lineate. It is widely used for the treatment of liver ailments. The explants were tested with different medium, aminoacids, carbohydrates in various concentration and combination with plant growth regulators. The highest percentage (94.2%) of proliferation of multiple shoots were obtained by placing nodal segments on MS salts with B5 vitamins (mMS) supplemented with 1.5 mg/L 2ipin combination with 0.6 mg/L Kin and Glutamine (20 mg/L) which produced 7.8 shoots per explant. The elongated shoots were excised and transferred onto mMS medium supplemented with various concentrations (0.5 to 3 mg/L) of IAA, IBA and NAA. Among 3 auxins 2.0 mg/L IBA supplemented medium produced highest percentage (95.6%) of root length. The well rooted plantlets were transferred to pot containing garden soil and farm yard manure (2:1) and placed in environmental plant growth chamber for proper acclimatization and subsequently transfer to green house conditions. The in vitro propagated plants were established successfully in vivo and the survival rate was 78%
INDUCTION OF HAPLOID ANDROGENIC EMBRYOIDS
FROM Datura metel L.

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ABSTRACT

Haploid androgenic plantlets were produced through culture of anthers of Datura metel L. on Murashige and Skoog medium supplemented with different concentration of 2, 4-D and coconut water. The haploid nature of plantlets was confirmed through cytological observations. The percentage of anther callus and number of embryoids were high in 10% coconut water and 2 mg/l 2,4 - D combination. Further development of embryoids was achieved in MS basal medium without growth regulators.
MIKANIA MICRANTA KUNTH- MA CLIMBING EXOTIC WEED- A NEW REPORT TO THE FLORA OF TAMILNADU.

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ABSTRACT

Sri Rangam is an island formed by the river Cauvery and Kolirone, in central part of Tamil Nadu, about 8 miles in length and 4 miles in breadth. It is rich in terms of floristic composition, 470 species (Matthew, 1983). While taking a field visit in the Island, the authors have collected a climber, a member of Asteraceae family close to Mukkombu. On close observation with herbarium specimens from MH, Coimbatore, it was identified as *Mikania micrantha kunth*. It is a new report to the flora of Tamil Nadu. Its distribution is recorded in Peninsular India and Andaman Nicobar Islands (MH herbarium, Coimbatore). Hence this paper presents illustrations, distributions and the ecology of this species.
AN EXTENDED DISTRIBUTION OF *IPOMOEA RUMICIFOLIA* CHOISY AND *JATROPHA HEYNEI* BALAKR.- TO THE EASTERN GHATS OF TAMILNADU

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**ABSTRACT**

Floristic exploration in the Eastern Ghats is an enduring process because this region is distinctive in many aspects. At the time of a field visit the authors collected and identified two rare and little known species, *Ipomoea rumicifolia* Choisy And *Jatropha heynei* Balakr. Belonging to the family Convolvulaceae and Euphorbiaceae respectively. Description and an illustration of the same are provided.
BEE FORAGE PLANT PREFERENCES OF *Apis* BEE SPECIES IN KHAMMAM DISTRICT, ANDHRA PRADESH.

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ABSTRACT

The present paper is melissopalynological analysis of 52 squeezed honeys of *Apis dorsata*, *Apis florea*, and *Apis cerana* from four revenue divisions of Khammam District, Andhra Pradesh. Of the 52 honey samples collected comprise 24 of *Apis dorsata*, 16 of *Apis florea* and 12 of *Apis cerana*. Bees forage plant preferences are more extensive for *Apis dorsata* as compared to those of *Apis florea* and *Apis cerana*. 
HOST TREE PREFERENCES FOR HONEY COMB FORMATION OF THREE BEE SPECIES IN KHAMMAM DISTRICT, ANDHRA PRADESH.

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ABSTRACT

Khammam district is one of the rich forest areas of the Andhra Pradesh. Even though the forest area has rich diversity of tree species, bees prefer only a few of the tree species to build the combs, and this host specificity is determined by the behaviour of honeybee species, branching pattern of preferred bee trees and the tendency of tree species to form crevices in tree trunks.
ABSTRACT

In India, about 7500 plants are recognised with medicinal value that are being used by various traditional systems of medicines such as Ayurvedic, Homeo, Siddha, Folke, Tibetan, Modern and Unani. The use of plants as medical drug products was mentioned in ‘Rig Veda’ which were written between 4000 and 1600 B.C. From long ago medicine men vaidya, tribal priests, herb doctors or ayurvedic vaids, used various plant parts in preparation of crude drugs. The present investigation gives an account of different uses of plants from Nasik District. 32 medicinal plants belonging to 28 genera and 21 families are dealt herewith which are used by tribals and villagers for cure of different diseases. The aim the present investigation is to enumerate the medicinal plants used by rural people and their medicinal uses. It also throws light on their botanical name/s, local name/s and their use/s.
GENUS *PAGIOPHYLLUM* HEER 1881 FROM OMMEVARAM, PRAKASAM - DISTRICT, ANDHRA PRADESH.

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ABSTRACT

Plant fossils collected from Ommevaram in Prakasam district of Andhra Pradesh are described. Two species of Genus *Pagiophyllum* Heer are reported from the locality.
ETHONOMEDICINAL PLANTS USED BY THE TRIBAL PEOPLE OF NASIK DISTRICT TO CURE DIARRHEA

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The history of medicinal plants is intimately connected with the history of botany. An ethnobotanical study of Nasik district has been carried out of the tribals, who live in dense forest far away from the urban area. The local inhabitants have developed and preserved a very old and strong tradition of folk medicine. The use of 28 plant species along with their local names and other information is presented.
EXTENDED DISTRIBUTION OF *DIPCADI SAXORUM* BLATT. (HYCINTHACEAE)- A CRITICALLY ENDANGERED PLANT TAXA

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ABSTRACT

In the present paper, the extended distributional range, morphology and cytology of *Dipcadi saxorum* Blatt. are reported.
NEW HOSTS OF *CASSYTHA FILIFORMS* L. (LAURACEAE)

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ABSTRACT

The present communication reports new taxa parasitized by *Cassytha filiforms* L. These hosts belong to 46 species, 40 genera distributed in 28 families of flowering plants. The adaptability of the parasite with the host is discussed.
ABSTRACT

The present contribution related to a new cytotype from the populations of *Urginea indica* Kunth, with 2n = 24. Further occurrence of cytomixis in this populations is a new record for the species.
In this work a species of *Trentepohlia* belonging to the order Chaetophorales, class Chlorophyceae has been reported from hilly region of Darjeeling in the provinces of North East Himalayas. Morpho-taxonomic description of the specimen is provided.
RE-INVESTIGATION ON ANATOMY OF *HUBBARDIA* BOR: A MONOTYPIC GENUS FROM WESTERN GHATS.

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**ABSTRACT**

Present study is a re-investigation of anatomy of *Hubbardia heptaneuron* Bor. The leaf shows some distinctive anatomical characters not reported for any other grass genus.
POST - FERTILIZATION DEVELOPMENTS IN OVULES OF HYDROBRYUM GRIFFITHII (WALL. EX GRIFF.) TUL. (PODOSTEMACEAE)

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ABSTRACT

Ultrastructural and bistochemical apicol-basal polarity in the zygote, details of embryogenesis and postfertilization developments in ovules highlighting formation of suspensor haustoria, nucellar plasmodium and endothelium in Hydrobrium griffithii are reported. That the embryo development of this taxon follows onagrad type unlike the other members of podostemaceae is noteworthy.
DEVELOPMENT OF STAMEN IN POLYPELURUM WALlichii (R.Brown EX Griff.) Warm. (Podostemaceae) growing in North East India.

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ABSTRACT

In P. wallichii the flowers are cleistogamous, enclosed by a thin membranous spathe. Two stamen are borne on a forked filament placed adjacent to the stigmatic lobes. Ontogenetically the two stamen developed separately; as a result of intercalary growth, the filament becomes bifid. The archesporiuses comprises of uniseriate rows of cells, the stamen wall consists of a very thin epidermis, unilayered endothecium with fibrous thickenings and the tapetum with uni & binucleate cells. The stamen wall development is reduced type; middle layers are absent. The connective tissue cells also acquire fibrous thickenings. Cytokinesis of microspore mother cell is successive type within a distinct callose wall. Pollen grains are dispersed as dyads with minute and dense granular exine.
EVALUATION OF ANTIMICOBIAL ACTIVITY OF SOME MEDICINAL PLANTS

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ABSTRACT

Antimicrobial activity of the aqueous extracts of 15 commonly available plants was determined against the pathogenic bacterial strain namely *Staphylococcus aureus* using the disc diffusion method. Among the 15 plants, two plants namely *Vitex negundo* and *Ocimum sanctum* were found to have antimicrobial effect by exhibiting distinct inhibition zones.

ANTIBACTERIAL ACTIVITY OF SOME PLANTS AGAINST *STREPTOCOCCUS PYOGENES*

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ABSTRACT

The antibacterial effect of eight species of herbs against the predominant pathogenic bacterium *Streptococcus pyogenes* was studied. The antibacterial effect was determined by well-diffusion and disc diffusion methods. The extent of inhibition zones were compared with the standard drug inhibition spectrum (Amphicillin). The susceptibility of the bacterium against the leaf extracts was determined. *Ocimum sanctum* and *Solanum tribatum* showed highest inhibitory effect. *Leucus aspera, Eclipta alba, Achyranthes aspera, Acalypa indica* and *Phyllanthus niruri* showed moderate effects while *Cleome gynandra* showed least inhibitory activity against the growth of *S. Pyogenes*