SPECIAL PRESENTED POSTER:

Diversity and useful products in some Verbenaceous member of Melghat and Amravati regions, Maharashtra, India

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Ingole SN. 2011. Diversity and useful products in some Verbenaceous member of Melghat and Amravati regions, Maharashtra, India. Proc Soc Indon Biodiv Intl Conf 1: 264-281. Verbenaceae is a large family of very diverse habit. The present study deals with detailed characteristics, distribution and economically important products of some verbenaceous members of Melghat and Amravati regions. During the survey twenty members belonging to fourteen genera of Verbenaceae were collected. Some members occur abundantly either in wild or cultivated state like Lantana camara L. var. aculeata Mold., Lantana flava Medik., L. nivea Vent., Glandularia bipinnatifida (Schauer) Nutt., Duranta erecta L., Vitex negundo L., Volkameria inermis L., Clerodendrum phlomidis L. f., Clerodendrum splendens G. Don, Nyctanthes arbor-tristis L. etc. while Petrea volubilis L., Gmelina arborea Roxb., G. philippensis Cham., Stachytarpheta jamaicensis (L.) Vahl., S. mutabilis (Jacq.) Vahl., Ratheca serrata (L.) Steane & Mabb., Holmskioldia sanguinea Retz. are not much common and occur in limited locations. Phyla nodiflora (L.) Greene, a creeping much-branched herb is found typically in wet places. Tectona grandis L. f. occurs very variable in size according to its habitat and is common dominant tree in forest of Melghat and also planted in plains. Clerodendrum infortunatum L., a gregarious tomentose shrub is exclusively found in shades of forest at limited spots in higher elevations of Melghat. The various members are not only beautiful ornamentals but also the source of important medicinal products useful in a broad range of diseases including skin disorders and snake remedies; they contain alkaloids, sterols, saponin, glucosides, dyes etc. and are economically quite important e.g. as high quality timber. On basis of morphological diversity the generic key is provided.

Verbenaceae, diversity, Melghat, Amravati, medicinal plants

Verbenaceae is a comparatively a large family composed of about 35 genera and about 1000 species (Atkins 2004). The name Verbenaceae was given by Persoon (1806) and has been conserved over older name Pyreneaceae (Vent 1799). In India it is represented by nearly 22 genera and more than 110 spp, some of the members being only grown as ornamentals. Verbenaceae is a widely distributed family of very diverse habit. They may be trees, shrubs or herbs, lianas occur fairly commonly, but no general distinctive habit is peculiar to the family as a whole.

Verbenaceae is a family of mainly tropical flowering plants. The plants in Verbenaceae can usually be recognized by combination of traits, containing trees, shrubs and herbs notable for heads, spikes, or clusters of small flowers, many of which have aromatic smell (Stevens 2001), with opposite leaves and flowers with slightly bilateral corolla symmetry. Their fruits are fleshy or dry, generally with two or four seeds, often dividing into two or four segments (Marx et al. 2010).

Herbs, lianas, shrubs or trees, sometimes with prickles or thorns; stems usually square in cross-section; usually with iridoids; often with phenolic glycosides. Hairs simple, gland-headed, with ethereal oils (including terpenoids), and non-glandular, usually unicellular, sometimes calcified or silicified. Leaves opposite or occasionally whorled, simple, sometimes lobed, entire to serrate, with pinnate venation; stipules lacking. Inflorescences indeterminate, the lateral units individual flowers or appearing as individual flowers or appearing as individual flowers, forming racemes, spikes, or heads, terminal or axillary. Flowers bisexual, bilateral. Sepals 5, connate, the calyx tubular to bell shaped, persistent, occasionally enlarged in fruit. Petals 5 (but sometimes seemingly 4 fusion of the upper pair), connate, the corolla weakly 2-lipped, the lobes imbricate. Stamens 4, didymous; filaments adnate to corolla; pollen grains usually tricolpate, exine thickened near apertures. Carpels 2, connate, ovary superior, unlobed to ±4-lobed, 2-locular but apparently 4-locular due to development of false septa, but sometimes 1 carpel suppressed and then appearing only 2-locular, with axele placentation; style not apically divided, terminal; stigma usually 2-lobed, conspicuous, with well developed receptive tissue. Ovules 2 per carpel (i.e. usually 1 in each apparent locule), each marginally attached (attached directly to margins of false partitions), with 1 integument and a thin walled mega-

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