

**COMPARATIVE STUDIES ON THE MORPHOLOGY, ANATOMY OF CROTON
BONPLADIANUMBAILL AND MICROCOCCAMERCURIALIS(L)
BENTH(EUPHORBIACEAE.)**

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ABSTRACT

Croton bonplandianum Baill and *Micrococcamercurialis* (L.) Benth belonging to Euphorbiaceae were distinguished apart from their ethanobotanical values, for which its morphological and characters are included. The present study was undertaken in complete morphology and anatomical characters of leaf, stem, root of both the plants. Morphological features were observed in leaf, stem, root, fruit with seed. Anatomical features were noted by rotary microtome sections and free hand safranin stained sections, and examined under bright field microscope. Both the plants possess the common features like calcium oxalate crystals distributed in leaf, well represented vascular bundles in petiole, leaf, stem and root. Their distinct features like vasculature in petiole, sclerenchyma, lactifers are observed only in *Croton bonplandianum*, and *Micrococcamercurialis* has advanced organization of phloem elements concentric, amphicribal vascularisation in leaf and stem, no sclerenchyma, prominent bicollateral vasculature in wing-bundles of petiole. Leaf lamina showed loosely arranged spongy parenchyma with wide air-space. The root shows oxidative hermidin blue layer with crushed cortex. These anatomical results are helpful to learn more about Claoxylon features in family Euphorbiaceae.

KEYWORDS : Amphicribal, Ethanobotinal, Hermidin, Lactifers, Mesophyll, Petiole, Sclerenchyma,

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