

### Theme 3: Biodiversity – Terrestrial, Aquatic

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#### ON SPECIES OF CALOTROPIS: EVOLUTION IN ACTION

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Only two species of *Calotropis* R. Br. genus namely *Calotropis procera* R. Br. and *C. gigantea* R. Br. are usually reported in literature. Study of variation in these species distributed over a stretch of about hundred and fifty kilometers in the eastern Uttar Pradesh suggests the presence of at least four types of plants. These plants can be easily identified as *C. gigantea* blue (cgb) and *C. gigantea* white (cgw), *Calotropis procera* blue (cpb) and *C. procera* white (cpw). Simple morphological characters like maximum attainable plant height, corolla shape and corolla color are sufficient for constructing artificial dichotomous keys and their unambiguous identification. A preliminary systematic study of these four types of plants on the basis of scatter plots between leaf length and leaf width also indicates their clear differentiation. Study of such variations in *Calotropis* leading to identification of clear differentiation and development of reproductive isolation barriers may help us identify suitable species or ecotypes/genotypes that can be tried further for tapping their full potential as medicinal and petro-crops, insect trap crops and ideotypes for multistorey cropping.