

PART-IV

INVESTIGATION ON THE WHOLE PLANT OF EUPHORBIA SIKKIMENSIS BOISS

## CHAPTER-I

Euphorbia Linn.<sup>1</sup> : About 600 species have been identified in all climates but the very cold.

Herbs or shrubs of various habit with copious milky juice. Inflorescence of many male and one female flower in a small 4-5 lobed turbinate or companulate perianth-like involucre; lobes with thick glands at the sinuses; glands with often a petal-like spreading white or coloured limb. Male flower a pedicelled stamen with floral envelopes of any kind; anther-cells usually globose. Female flower a solitary pedicelled 3-celled 3-ovuled ovary, in the centre of the involucre, also without envelopes; styles 3, free or combined simple or 2-fid. Capsule or 3-2 valved cocci separating elastically from a columella and dehiscing ventrally or both ventrally and dorsally. Cotyledons broad, flat.

Euphorbia Sikkimensis Boiss.<sup>2</sup> : Belongs to the Galarrhaeus section of Euphorbia genus. In this section the glands are involucrel transversely oblong with rounded margins. The plants are perineal herbs, capsules smooth. About 32-40 species have been reported in this section of Euphorbia genus of which one is Euphorbia Sikkimensis.

E. Sikkimensis Boiss. is quite glabrous, leaves  $2\frac{1}{2}$ -4 inch, petioled linear oblong or -lanceolate acute, nerves ascending obscure, floral whorled and 3-4 involucrel ovate oblong obtuse, involucres hemispheric glabrous without hirsute within, lobes ovate ciliate, styles very slender

connate to the middle, capsule  $\frac{1}{6}$  inch diameter smooth, seeds smooth.

Stems 3-4 ft. from a rootstock, stout, but not woody, branched above. Leaves  $\frac{1}{2}$  -  $\frac{2}{3}$  inch thinly coriaceous, narrowed into a distinct but short petiole. Rays several, often compound; involucre leaves  $\frac{1}{4}$  -  $\frac{1}{3}$  inch broad, yellow. Involucres  $\frac{1}{8}$  inch diameter, glands transversely oblong. Styles very shortly 2-fid. Capsule  $\frac{1}{4}$  inch diameter; pedicel about as long; cocci globose. Seeds  $\frac{1}{10}$  inch diameter; nearly globose; caruncle small. The leaves narrowed into a slender petiole and short involucres distinguish this from E. Longifolia.

The plant is available in Sikkim Himalayas, in the inner valleys at an altitude 8000-10000 ft.