

PART - III

CHEMICAL INVESTIGATION ON THE RHIZOMES

OF POLYPODIUM JUGLANDIFOLIUM DON

PART - III

CHAPTER - I

Morphological features of the fern of Polypodium juglandifolium Don (syn Arthromeris juglandifolia) :

The Polypodiaceae^{1a-1b} constitute the highest and largest family of true ferns. It is a family of 170 genera and 7,000 species, widely distributed over most of the land areas of the earth, especially abundant in forest and humid areas, but occurring in almost all floristic areas or zones from desert to rain forest and from tropics to arctic or antarctic. The following list includes most of the large genera : Pteris, Adiantum, Athyrium, Cheilanthes, Dryopteris, Polystichum, Asplenium, Blechnum, Elaphoglossum, and Polypodium.

Polypodium juglandifolium Don^{1c} : Terrestrial and epiphytic ferns of moderate size; rhizome being creeping, long, stout, dictyostelic and with sclerenchyma strands, clothed with lanceolate, attenuate, entire, brownish perianthia affixed above the base; stipes remote, articulate, long; fronds uniform, imparipinnate, lateral, pinnae articulate to rachis, opposite, lanceolate, acuminate, naked or pubescent, subcoriaceous, margin coriaceous and entire, main veins conspicuous, minor venation not so,

areolae irregular, with simple or forked included veinlets running in any direction; sori solitary or plural between main veins, compital, round, superficial, without paraphyses, annulus of 14-16 cells, spores bilateral, brownish, obscurely tuberculate or spinulose.