

.....

P A R T — IV

CHEMICAL INVESTIGATION OF THE ROOT OF

LEUCAS ASPERA SPRENG

.....

CHAPTER--I

INTRODUCTION

Leucas Aspera¹ which is called "Chota-halkusa" in hindi belongs to Leguminosae family. The plant is fragrant and used as a Pot-herb. It is eaten in times of scarcity. It is commonly used as an antipyretic in villages in S. India. The juice of the leaves is used as an external application for psoriasis, chronic skin eruptions and painful swellings. In North Bengal flowers are given with honey for coughs and colds in children. An alcoholic extract of leaves shows² anti-bacterial activity against *Micro Coccus pygeus*, Var. *aureus* and *Escherichia coli*.

Leucas Aspera which is commonly known as "Dandakalas" in North Bengal is abundantly available in the barren cultivated land. The plant generally grows in the barren lands during December to April. It is found that the married folks of "Rajbangshies" - the local inhabitants of North Bengal region use the root of this plant as oral contraceptive. Moreover, the flowers have also been found to be used for treatment of cold. In order to explore whether there is any active principle present in the plant that could behave as oral contraceptive, we attempted to isolate the different constituents present in the plant.

Aditya Chowdhuri and his coworkers⁵ have reported the presence of oleanolic acid, ursolic acid and β -sitosterol from the petroleum extract of the whole plant of Leucas Aspera. Since the local people take the root of the plant as contraceptive we thought that the active principle must be present in the root of the plant. Part IV of the dissertation contains chemical investigation of the root extract of Leucas Aspera spreng.