

V. THE VISCID SUBSTANCE COVERING THE LEAVES AND STEMS OF MARTYNIA

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The leaves and stem of *Martynia louisiana*, "Devil's Claw," from the arid portions of southwestern Oklahoma, are covered by clear viscid droplets of some undetermined substance. From experiments begun in the chemical laboratory of the University of Oklahoma, the writer has the following to report:

The substance mentioned above can be extracted in the form of a viscid gel by hot (not boiling) water. In this form the substance is difficult, if not impossible to filter. If, however, ammonia is carefully added to the gel, it will form what is believed to be a sol and become mobile and easily filtered without suction. On adding more ammonia to the sol the latter again precipitates in the form of a gel, the precipitation concentration having been reached for ammonia (or its salts). The exact precipitation concentration was not determined but will be further investigated. The substance, isolated by evaporating the sol on a water bath to dryness was seemingly recovered unchanged. It was apparently insoluble in water, benzene, chloroform, alcohol, ether, and carbon disulfide. These solvents were used both hot and cold. By the extraction and evaporation process outlined above about 4.5 percent of the substance was obtained from the leaves.

The investigation of the plant is being further pursued and the writer would welcome citations of references bearing upon his subject.