

## Detection of Saponin from *Euphorbia Cristata* Heyne

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### Abstract

Saponin was qualitatively detected from *Euphorbia cristata*.

**Keywords:** *E. Cristata*, saponin, TLC.

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### INTRODUCTION

Plant is the rich source of different chemical substance, such as steroids, tannins, resins, alkaloids, flavonoids etc. Saponin is one of them. Plant saponins are widely distributed amongst plants and have a wide range of biological properties [1]. Saponin contain oligosaccharide combined with the aglycone. Saponins are soluble in water. They show hydrophobic and hydrophilic properly. Saponin play important role to stimulate serum protein biosynthesis [2]. *Euphorbia cristata* is prostrate annual herb. Stem is slender 10-25 long with long flexuous hairs. Leaves are opposite broadly ovate. Obliquely cordate at base, seriate, membranous, pubescent, petiole are short, stipules are hairy, cyathia is solitary in the axils of upper most floral leaves. Appendages 2-3 mm long fruits is 2-2.5 mm long.. *Euphorbia* is also the source of diterpene, triterpene [3]. The phytochemical work of *Euphorbia cristata* is scanty. Hence, the present study was undertaken to detection of Saponins in the same plant.

### MATERIALS AND METHODS

*Euphorbia Cristata* L. was collected from Hingoli district. (M.S.), India. It was identified on the basis of the morphological characters up to the species level. The plant material was dried in oven at 50 °c. Saponin was quantitatively detected by TLC method.

### RESULTS AND DISCUSSION

Saponin was detected from *Euphorbia cristata*. The saponin was examined by R.F. value and coloration reaction on TLC plate. When TLC plate was sprayed by blood reagent, the saponin was appeared as white zone with reddish background. R.F. value was 0.25 and when TLC plate was sprayed with vanillin sulphuric acid reagent, it was appeared as yellow spot., it can be concluded that this plant is source of saponin which can be used in pharmaceutical.

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