

Abstract

There are plenty of medicinal wild plants found in the plains and mountain range and their special habitats. This study was conducted to evaluate the quantitative and qualitative features of *Euphorbia Tirucalli* in some natural habitats of Southern part of the province of Sistan and Baluchestan such as Nikshahr, Rask and Sarbaz. The results showed that there are significant differences in the morphological traits of the number of branches, height, trunk diameter, and diameter of branch and intermediate interval between cities and regions. In this study, the morphological traits of shrubs consisted the number of main branches, tree height, trunk diameter and branch diameter in the Nikshahr city. The lowest height and number of branches belonged to Sarbaz city, which indicates that by increasing altitude from the sea level, it has impact on the vegetative growth the shrub will be reduced. The amounts of photosynthetic pigments in Nikshahr city also showed that the city more desirable for the development of this medicine. The results of analysis of plant and stem essential oil showed that the highest concentration of palmitic acid and caryophyllene is in the plant leachate. The amount of these compounds is higher in the summer. Therefore, it is recommended to use it in summer for medicinal purposes. The amount of these compounds is higher in the summer. Therefore, it is recommended to use it in summer for medicinal purposes.

Key words: Natural habitats, Secondary Metabolite, Pencil shoots, Extract, Caryophyllene, Palmetic acid



University of Zabol

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Title

**Evaluation of quantitative and qualitative traists of Bushes
pencil (*Euphorbia tirucalli*) in some natural habitats of
Baluchestan province.**

Supervisor

Dr. M. Mosavi nik

Dr. M. Galavi

Advisors

Dr. A. Ghanbari

A. Raeisi

By

Y. Sepahi

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