

TO CATEGORIES 

1.400.000 PAGES OF RESEARCH

MONTHLY
1.200.000
PAGE VIEWS

OVER
300.000
VISITORS PER MONTH

new E-BOOKS 

FULLTEXT SEARCH

[GO!](#)

NEW: [Advanced Search](#)

Periodicals:

MSF

> Materials Science Forum

KEM

> Key Engineering Materials

SSP

> Solid State Phenomena

DDF

> Defect and Diffusion Forum

AMM

> Applied Mechanics and Materials

AMR

> Advanced Materials Research

AST

> Advances in Science and Technology

JNanoR

Study on Characteristics of *Quercus aliena* var. *acuteserrata* Community in Mt. Qinling

Journal [Applied Mechanics and Materials](#) (Volumes 52 - 54)

Volume [Advances in Mechanical Engineering](#)

Edited by Zhou Mark

Pages 949-952

DOI 10.4028/www.scientific.net/AMM.52-54.949

Citation Yong Hua Zhao, 2011, Applied Mechanics and Materials, 52-54, 949

Online since March, 2011

Authors [Yong Hua Zhao](#)

Keywords [Quercus aliena](#) var. [Acuteserrata](#), [Leaf-Form](#), [Life Form](#), [Mt. Qinling](#)

Abstract In *Quercus aliena* var. *Acuteserrata* community, phanerophytes (Ph) accounting for 58.7% was main Life form. Hemicryptophytes (H) with 28.1% was the second in Qinling Mountains. Mesophyll which accounted for 61.64% was major leaf physiognomy, and microphyll the second accounting for 27.40%. Simple leaf taking 84.93% was primary leaf-form. Herbaceous leaf accounted for 80.82% and was a major type of leaf property. The temperate elements, which were 43.17% of the genera, were in dominant position and were consisted of 98 genera; the tropical areal types including 58 genera accounted for 25.55%. These showed that *Quercus aliena* var. *Acuteserrata* community has the transitional character, that is, it is in the ecotone.

Full Paper  [Get the full paper by clicking here](#)

First page example

Study on characteristics of *Quercus aliena* var. *Acuteserrata* Community in Mt. Qinling

Yonghua Zhao^{1, a}

¹ College of Earth Science and Resources Chang'an University, Xi'an, China

^a yonghuaz@chd.edu.cn

Keywords: Life form; Leaf-form; *Quercus aliena* var. *Acuteserrata*; Mt. Qinling.

Abstract. In *Quercus aliena* var. *Acuteserrata* community, phanerophytes (Ph) accounting for 58.7% was main Life form. Hemicryptophytes (H) with 28.1% was the second in Qinling Mountains. Mesophyll which accounted for 61.64% was major leaf physiognomy, and microphyll the second accounting for 27.40%. Simple leaf taking 84.93% was primary leaf-form. Herbaceous leaf accounted for 80.82% and was a major type of leaf property. The temperate elements, which were 43.17% of the genera, were in dominant position and were consisted of 98 genera; the tropical areal types including 58 genera accounted for 25.55%. These showed that *Quercus aliena* var. *Acuteserrata* community has the transitional character, that is, it is in the ecotone.

Introduction

Qinling Mountain locates at the middle part of China. It is the natural barrier between the south and north, the watershed of the Yangtze and yellow river's middle reaches and biological intersect. Its north-facing slope belongs to semi-humidity region of temperate climate, and the south-facing slope does humidity region of subtropical climate according to Chinese climate division^[1]. Special location decide that it is one of zone with abundant biology resource and biodiversity in china. *Quercus aliena* var. *Acuteserrata* distribute at temperate and north subtropical mountainous areas, Qinling is its mass distribution section and it is a better water conservation forest and an important Study on But, until now, there is no one to explain the transitional character of Mt. Qinling from a point of botany view. *Quercus aliena* var. *Acuteserrata* community was taken as a case to show the difference of the south-and the north-facing slopes and the ecotone character. And in this paper, basal data and research method were provided for further study in this region.

Methods

According to 311 permanent plots' data of *Quercus aliena* var. *Acuteserrata* stands and topography map, Qinling Mountains in shaanxi province were divided into three parts and boundaries were Baoji and Xi'an city respectively. Plots (area was 400m²)^[2] were respectively selected on the south-facing and north-facing slopes for different factors' discrepancy, such as altitude, gradient, slope aspect, stands age, forest type and human disturbance, et. In the site approaching to the ridge, topography changes rapidly, the boundary of communities is obvious and the distribution is short along contour line, so plots were chosen according to the direction paralleling to the contour line at the foot of the mountain and the middle of the hillside. But on the ridge or the upside swelled section of the hillside, plots were chosen along perpendicular direction of the contour line. There were 31 plots selected altogether. Common ecological methods were used to investigate and 1152 specimens collected.

Results

A. Life form

Life form is extrinsic manifestation that plants adapt to the exoteric circumstance. Species, which belong to the same life form, are the result of which they accommodate to the same circumstances for



> @scientific.net

CONFERENCE

> GO!

11/13/2012 - 11/15/2012

The International Conference on Advanced Eng

8/24/2012 - 8/25/2012

AMMT 2012: 2012 International Conference on

8/24/2012 - 8/26/2012

2012 2nd International Conference on Material :

[more...](#)