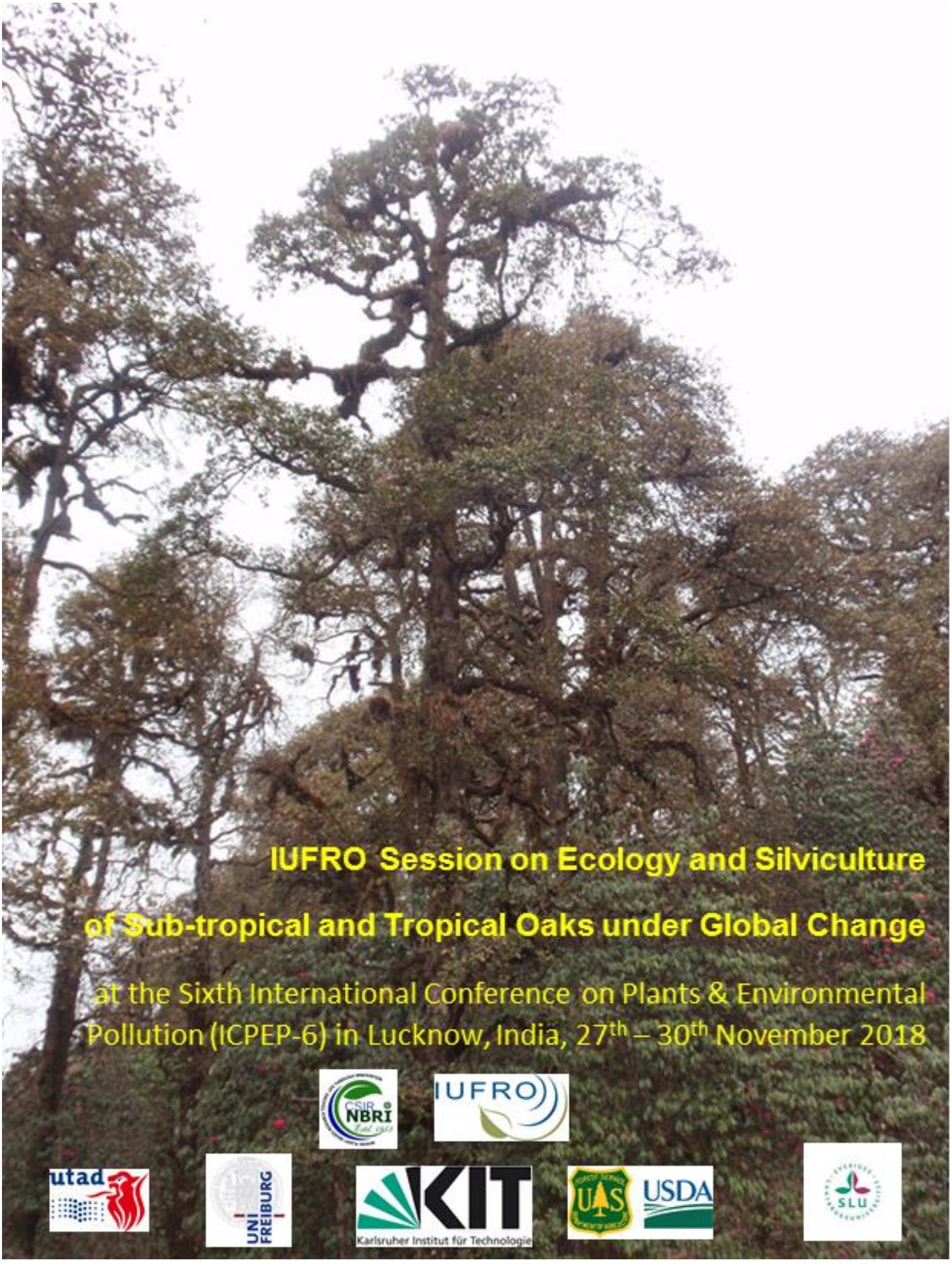


(Photo: Oak and Rhododendron forest, Near Chopta, ca. 2600m, Hiamalayas, India, Source: Somidh Saha)

IUFRO's Oak Unit (1.01.06: Ecology and Silviculture of Oaks) will organize a session at the Sixth International Conference on Plants & Environmental Pollution (ICPEP-6) in Lucknow, India, 27th – 30th November 2018.

Theme: Oak (*Quercus* spp.) trees are an important component of many hilly forests in sub-tropical and tropical areas in Central America, South Asia, and Southeast Asia. Oak forests in these parts of the world are declining and becoming vulnerable to climate change impacts such as droughts, floods, forest fires, mudslides, and cyclones. In addition, deforestation, poverty, rising level of pollution, and lack of sustainable forest management practices further contribute to the degradation of oak forests. This represents a significant ecological crisis because oak forests are known for high biodiversity and provide a wide range of ecosystem services to local populations. Therefore, immediate focus should be given to conservation and sustainable management of oak forests. However, our understanding of the ecology and silviculture of many subtropical and tropical oak species is inadequate. In this session, we welcome submissions of research and review works on subtropical and tropical oaks on a wide range of topics in the field of (but NOT limited to): forest ecology, restoration ecology, silviculture, soil science, biodiversity conservation, forest management, forest economics, forest entomology, forest pathology, traditional ecological knowledge, genetics, etc. The contributions in this session will be published in a special issue of an appropriate peer-reviewed journal.

Conference homepage: http://isebindia.com/

Abstract Submission deadline: **31st July 2018,** please see details at: http://isebindia.com/icpep-6/icpep-6-conference-circular.pdf

Funding: IUFRO will sponsor travel expenses for two candidates from the economically disadvantaged countries in Africa, Asia, and Latin America to attend the conference in India. Please see the list of eligible countries at: https://www.iufro.org/science/special/spdc/sap/

Session organizing committee: Somidh Saha (Karlsruhe Institute of Technology and University of Freiburg, Germany), Saroj K. Barik (National Botanical Research Institute, India), Magnus Löf (Swedish Agricultural University, Sweden), Daniel C Dey (USDA Forest Service, USA), Teresa De Jesus Fidalgo Fonseca (University of Tras-Os-Montes and Alto Douro, Portugal)

For queries, please contact: Somidh Saha (somidh.saha@kit.edu)

Oaks in India:

There are nearly 10 oak species in India. Oaks are commonly found above 1000m on the Himalayas and Northeastern Hilly region. They form association in mountain broadleaf forests with Rhododendrons, alders, laurels, and other species. The exact amount of oak forest area in India is difficult to estimate. However, recent studies had shown that oak forests are declining in many regions. The common threats are habitat destruction, shifting cultivation, forest fire, lopping, browsing, grazing etc. To what extent climate change plays a role in this decline needs to be investigated. Silvicultural and ecological know-hows for several oak species are still lacking. Oak forests in India are known for harboring high biodiversity, at the same time, provide a wide range of ecosystem services to mountain communities. Therefore, priorities should be given on the conservation and sustainable management of oak forests. Like in India, oak forests in other regions of tropics and subtropics have the similar challenges. We expect this session will be an opportunity for researchers, foresters, and conservationists to share their experiences and building a network for future research on the conservation and sustainable management of oaks forests in tropics and subtropics.

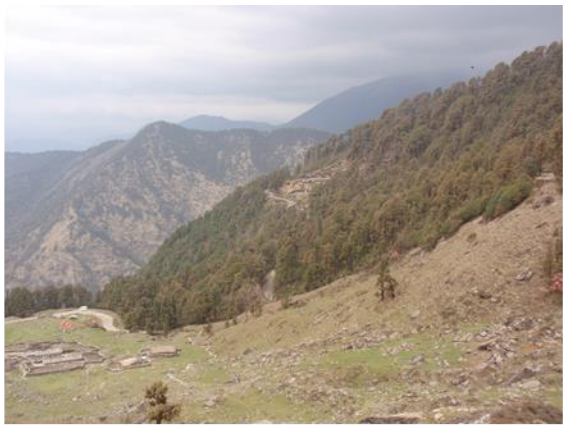
Few photographs of Indian oaks:

Quercus griffithii
Khasi hills (ca. 1800 m), India
(Photo: Prem Prakash Singh)

Q. leucotrichophora
Pauri, Himalayas (ca. 2000 m), India
(Photo: Somidh Saha)

Q. lineata
Khasi hills (ca. 1600 m), India
(Photo: : Prem Prakash Singh)

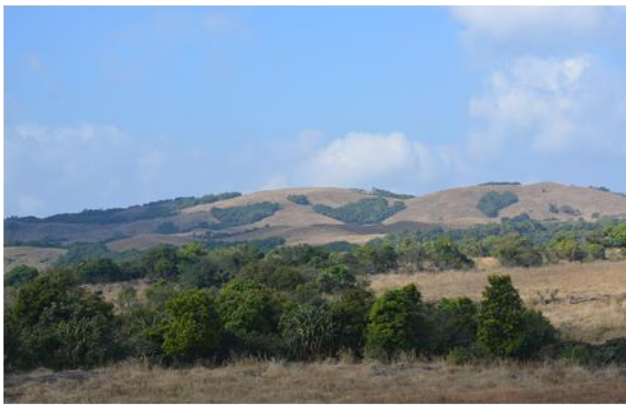
Quercus lineta acorns after a mast year, Khasi hills (ca. 1800 m), India. Survival rate is less than 1% ! (Photo: Prem Prakash Singh)



Q. leucotrichophora dominated forests, Chopta, Himalayas (ca. 2600 m), India. (Photo: Somidh Saha)

Q. leucotrichophora stand. Understorey heavily browsed, Chopta, Himalayas (ca. 2600 m), India. (Photo: Somidh Saha)

Heavily lopped *Q. leucotrichophora* dominated forests, Pauri, Himalayas (ca. 1600 m), India. (Photo: Somidh Saha)



Oak forest degraded by anthopogenic activities (e.g. shifting cultivation, grazing), Khasi hills (ca. 1400 m), Meghalaya, India (Photo: Prem Prakash Singh)