The 6th IAL Symposium and
Annual ABLS Meeting

Asilomar, CA, USA, 13-19 July, 2008

BIOLOGY OF
LICHENS AND BRYOPHYTES

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Preliminary study on possible distribution of tropical lichens under climate change

Changes in lichen distribution in the tropic caused by global warming were investigated by transplantation of lichens among ecosystems at Khao Yai National Park, Thailand. Thallus fragments of lichens which grow in tropical rain forest (TRF) (*Pseudocyphellaria argyracea*, *Relicina abstrusa* and *Relicina subconnivens*) and secondary forest (SF) (*Parmotrema rubromarginatum* and *Dirinaria picta*) were transplanted to lower mountain rain forest (LMF). Whilst those from LMF (*Hypotrachyna kingii*, *Heterodermia lepidota*, *Hypotrachyna osseoalba* and *Parmelinella chozoubae*) were transplanted to TRF, SF and dry evergreen forest (DEF). Thallus fragments were attached on barks at mid-trunks and canopies. Thirty one months after transplantation the survival percentages of lichens in LMF, TRF, SF and DEF were 46, 20, 8 and 5, respectively. This suggested that lichens from warmer sites could acclimate in 2-3oC cooler habitats, whilst those from the cool sites hardly thrive in warmer habitats and may be threaten to extinct under global warming. (Poster: Ecology, Thursday in Nautilus)