

Name of research institute or organization:

Institute of Botany, University of Basel

Title of project:

Study of plant temperature

Project leader and team:

Prof. Ch. Körner

Project description:

Ongoing microclimatological research on Dom (4546 m), the highest point in Europe where plants grow, needs to link with a long term station in order to assess the longer term meaning of 2 years of datalogging. Hence, my plan was to place three miniature data loggers in a similar manner as on the Dom summit and track temperature conditions, while datalogging continues on the Dom. Once I have established the correlation between soil temperature with standard meteorological air temperature at Jungfraujoch, I can scale the Dom data in time. I simply need a few short periods of soil temperatures without snow cover in midsummer. At the same time, I planned to make a list of plant species at the Jungfraujoch.



af. *Poa laxa* (Photo: Christian Körner)

Key words:

plant ecology, microclimate, temperature

Scientific publications and public outreach 2010:

Refereed journal articles and their internet access

Körner, Ch., Elevation record of plant life in Europe, submitted to *Alpine Botany* (Springer) December, 2010



af. *Poa laxa* (Photo: Christian Körner)



Draba cf. *dubia* = *tomentosa* (Photo: Christian Körner)

Data books and reports

Please find a diagram of the T readings below

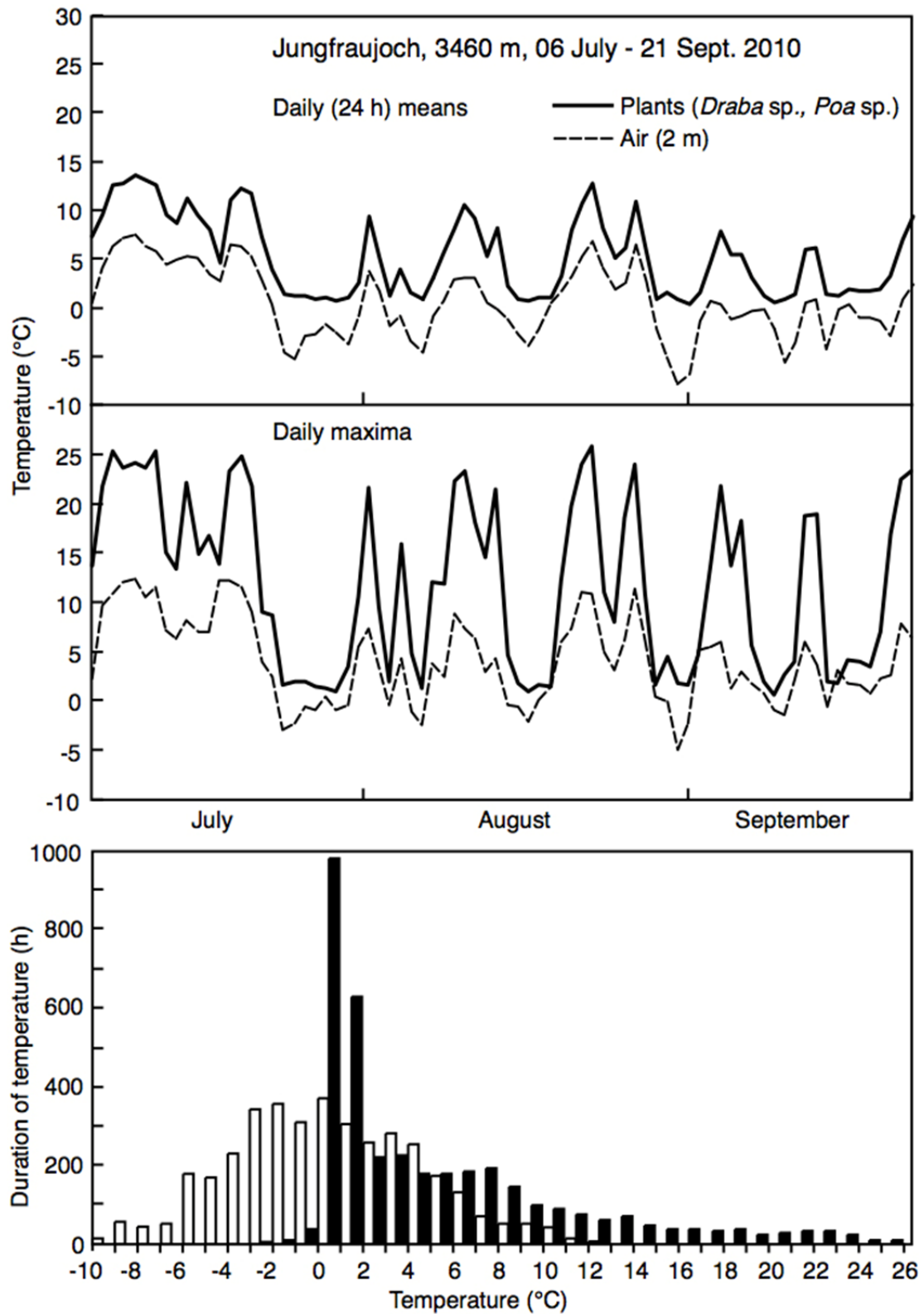


Fig. 1: Air (2 m) and plant temperature (2-3 cm under sparse plant cover, S-exposed) at Jungfrauoch (3460 m) during the 2010 growing season. Note the higher plant temperatures compared to air temperature.

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