

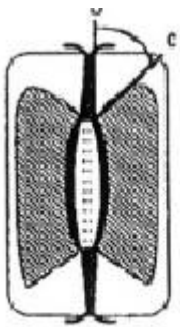
Stomata

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Stomata (Greek *stoma*-mouth)

Stomata are microscopic pores and specialized guard cells that are found on the epidermis of leaves, stems and some flowers.

Size: between 20 to 80 μm in diameter



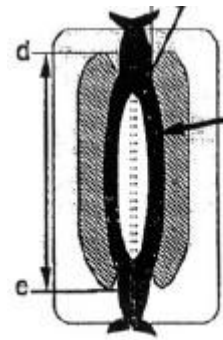
Abies
Fir



Picea glauca
White spruce



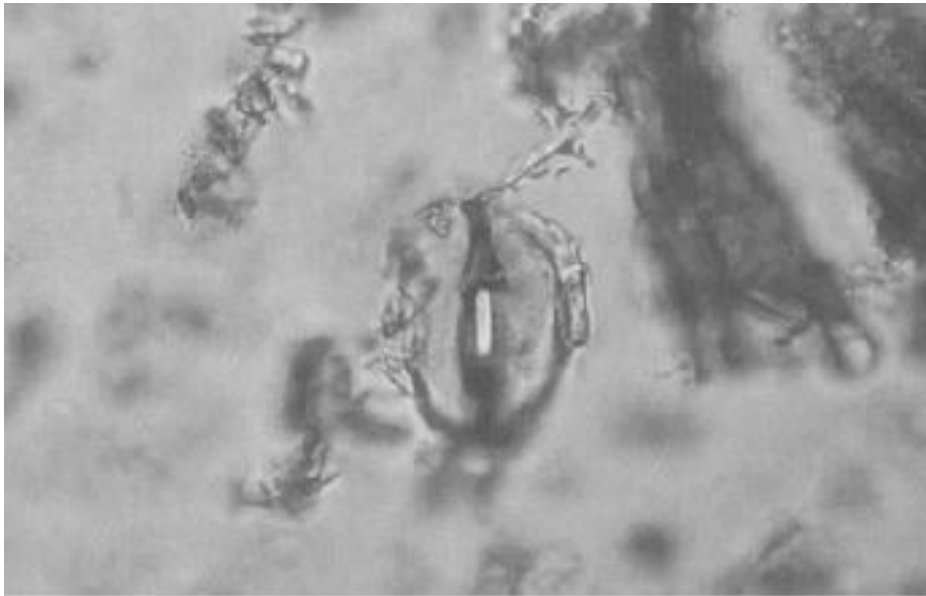
Larix laricina
American larch



Pinus
Pine

Where to find?

- ▶ Lake sediments and gytjas
- ▶ Peat



What are the strong sides of stomata analysis?

- ▶ Stomata is lignified
- ▶ More precise geographical position of plants
- ▶ More precise definition of species
- ▶ Possibility to conduct stomata analysis at the same time with pollen analysis

What can we reconstruct?

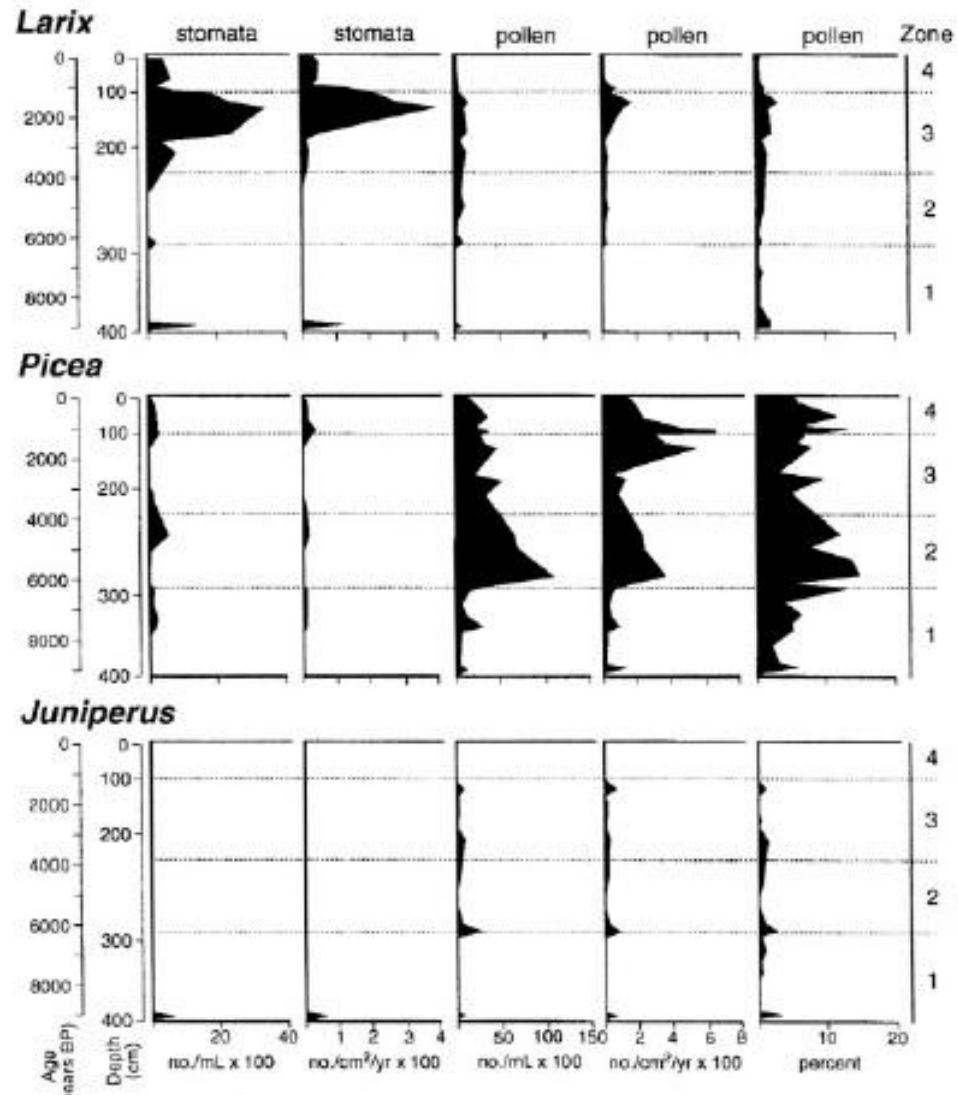


- ▶ the reconstruction of past vegetation



- ▶ the reconstruction of changes in atmospheric CO₂ concentrations

Example of vegetation reconstruction



- Fossil stomata and pollen from a sediment core from Derevanoi lake on the Taimyr Peninsula

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the left and right sides of the frame, creating a modern, layered effect. The central area is a plain white background where the text is located.

THANKS FOR YOUR
ATTENTION