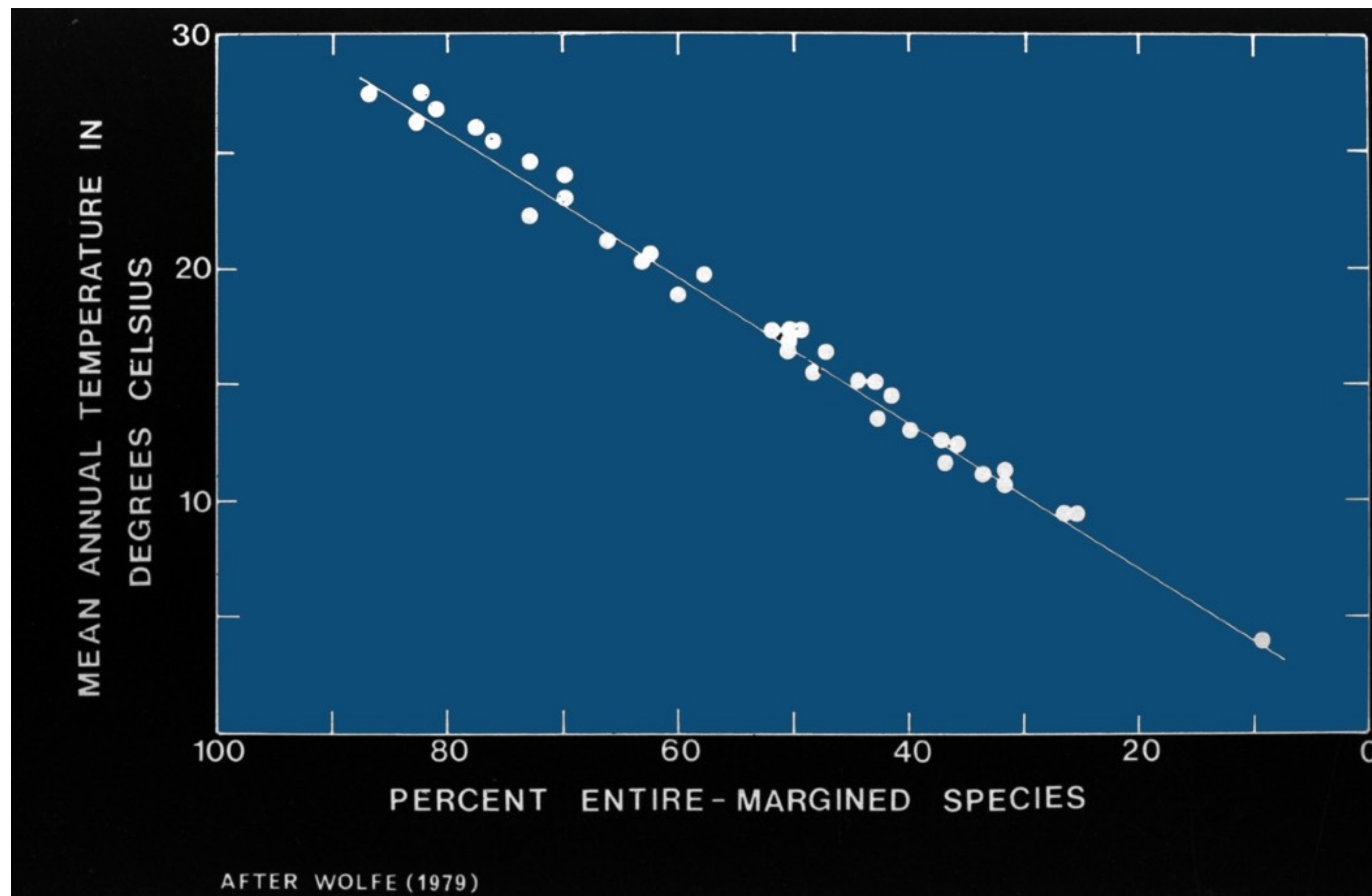




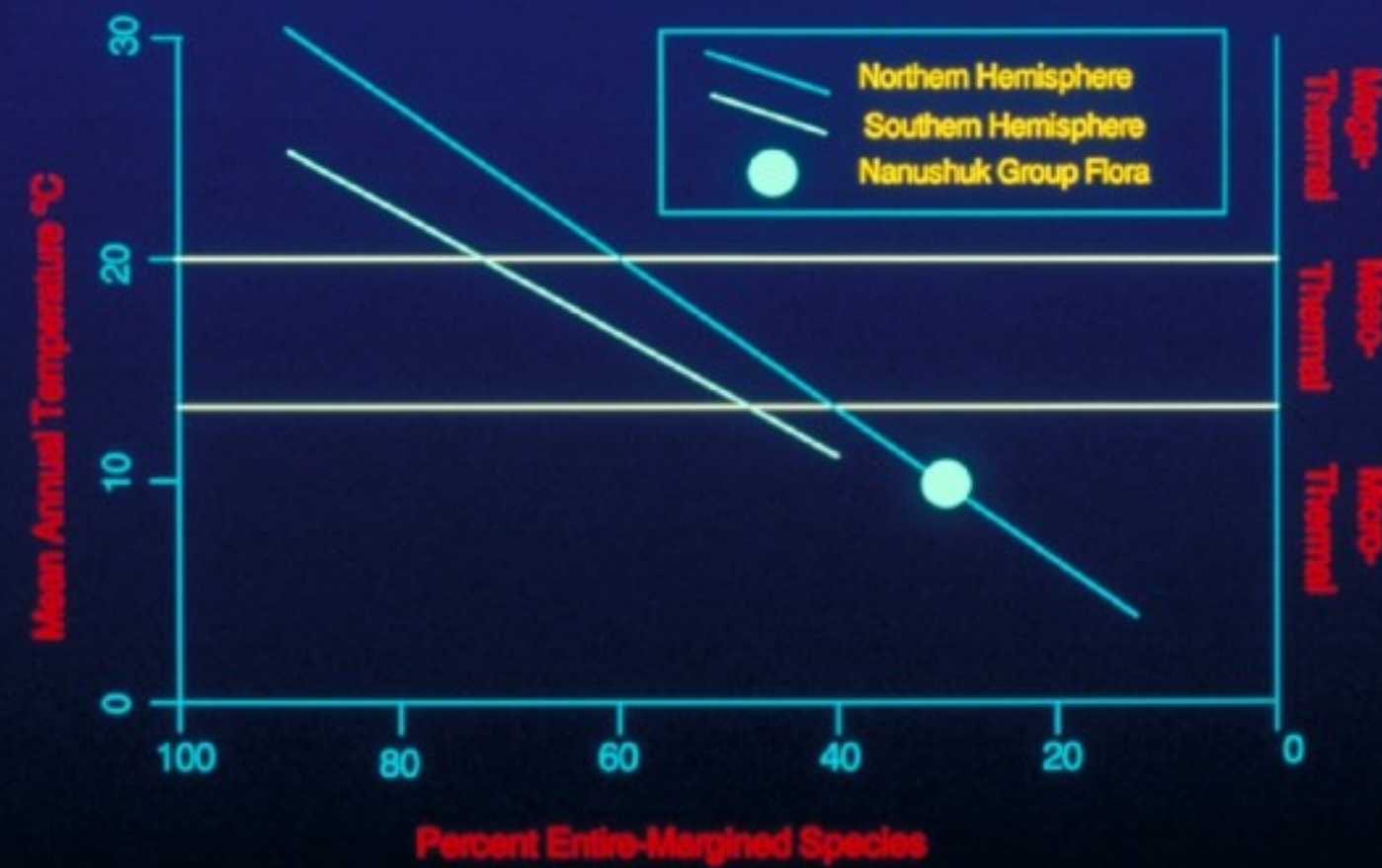
Other aspects of leaf architecture vary with environment. As long ago as 1915 Bailey and Sinnott noted in *Science* that for woody dicots in North America the proportion of taxa bearing toothed versus entire margined leaves varies with mean annual temperature.



In 1979 Wolfe retested this relationship using leaves from S.E. Asia.

The relationship only works where water is not limiting, i.e. in humid to mesic forests.

Leaf Margin Type and Temperature



Wolfe also noted that the relationship, as evidenced by the slope of the regression line, differs between Northern and Southern Hemispheres.

When tested using fossil floras Wolfe also noted that the percentage of entire margined taxa when plotted against palaeolatitude tracks changes in equator-to-pole temperature gradients (and global mean surface temperature).

There appears to be no change in slope associated with the polar light regime ($>66^\circ$).

