Air Pollution and Mortality

Abstract

In India, alkaline soil hampers tree growth. Thus, one is looking for tree species which are resistant against such environmental conditions. In a big outdoor test, 123 trees were planted on a big field with considerable variation in the soil pH-value. After 3 years of growing, their height was measured.

In the dataset, we are not only given pH-value and height, but also the squared height, as well as the log-transformed sodium absorption ratio (SAR). This predictor captures some different aspects of the basicity of the soil.

Notes

One of the main goals in this study is to predict the tree height for given soil parameters (pH-value and logged SAR). Additionally, we can also question whether the second predictor has a relevant contribution on the outcome. Also interesting are some aspects about outliers and robust fitting.