Project Database of ICP Forests
PROJECT DESCRIPTION

PROJECT INFORMATION

Project title:	**Derivation of nutritional threshold values for the element sulphur for the tree species fir (Abies alba)**
Project ID:	231
Contact person:	Axel Göttlein // goettlein@forst.tu-muenchen.de

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When evaluating the nutritional thresholds of the extensive literature compilation by van den Burg, no values could be derived for fir for the element sulphur (Göttlein et al. 2011). This was due to the fact that only 2 literature citations were available for this element for fir. However, sulphur is a macro-nutrient that is increasingly becoming latent or real deficient due to the significant reduction in emissions (Göttlein and Mellert 2018). It would therefore be important to have nutritional threshold values for the element sulphur available for the tree species fir. The applicant has developed a method that allows the derivation of nutritional threshold values from the cumulative frequency distribution (see enclosed publication). For this procedure, the largest possible number of needle analyses is needed. It would therefore be a great help if I could obtain an excerpt of needle analyses on fir (Abies alba) from the ICP Forests database (sulphur + all other macronutrient elements). Needle analyses at times of dormancy of the needle year 1 from the light crown are needed. In addition, it would be important for each data set to know from which year and from which country the analysis originates.

References

Göttlein, A., Baier, R., Mellert, K.H. (2011): New nutrition levels for the main forest tree species in Central Europe – A statistical derivation from VAN DEN BURG's literature compilation. Allg. Forst- u. J.-Ztg. 182, 173-186.

Göttlein, A., Mellert, K.H. (2018): Derivation of sulfur to nitrogen ratios for important Central European tree species from their range of normal nutrition and temporal change of these ratios from forest soil survey BZE I to BZE II. Allg. Forst- u. J.-Ztg. 189, 221-29.