

Abstract

From **Forestry Abstracts**, Vol. 8, No. 4. 1947. Wittich, W. Sur la possibilité d'une afforestation des sols de formation old-red-sandstone en Irlande. (On the possibility of afforesting soils of old red sandstone formation in Ireland). *Intersylva* 2 (3), (321-9).

Soils of the old red sandstone formation are common in Ireland and show a marked degree of podsolization; attempts at afforestation have mostly failed. These soils were formed from the sedimentation of inland lakes and consist mostly of quartz with an extremely low lime content. The moist climate with its cool summers is very unfavourable to the decomposition of vegetable matter, which has caused the development of thick layers of raw humus and peat. The A horizon reaches a depth of about 25 cm., the extremely condensed A/B horizon about 40 cm., followed by 7-10 cm. of extremely compact hardpan. The results of physical and chemical analyses of a typical soil profile are given. Nutrient conditions are unfavourable, but cannot alone be responsible for the complete failure of the Pine plantations. The physical qualities are decisive, as the impermeable A/B and B horizons cause water-logging after heavy rain. The main task of soil improvement would be to restore the permeability of the soil. The hardpan lies too deep to be broken up and treatment should probably be confined to mixing the upper layers and fertilizing them with lime. This would be feasible where the peat has not been removed and the hardpan lies deep. *Pinus contorta*, *P. montana* and perhaps *P. nigra* var. *austriaca*, seem to thrive better in these soils than *P. sylvestris*.

(It is hoped to publish a complete translation of this very interesting article dealing with one of our most important problems in a future number.—EDITOR).