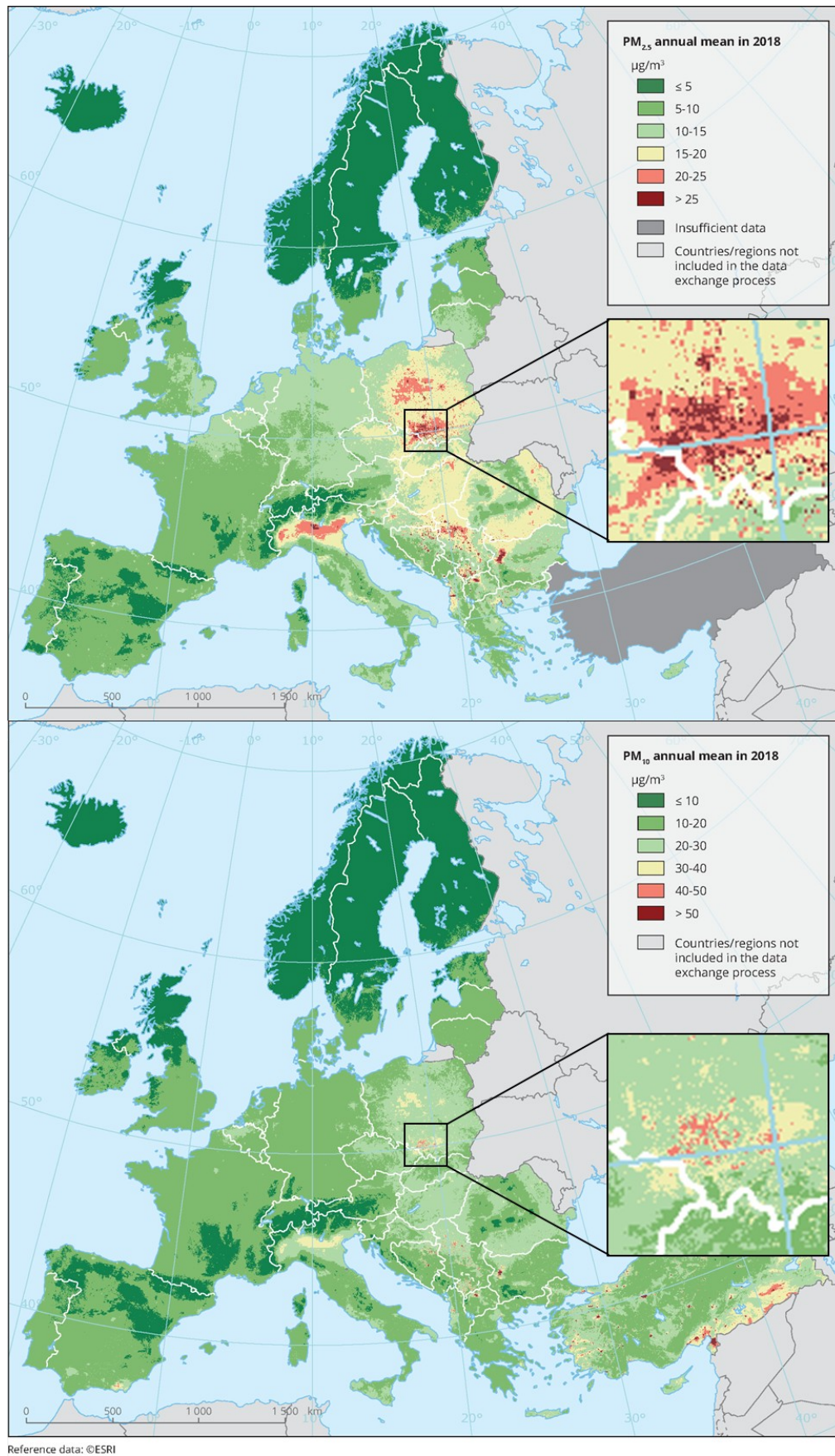
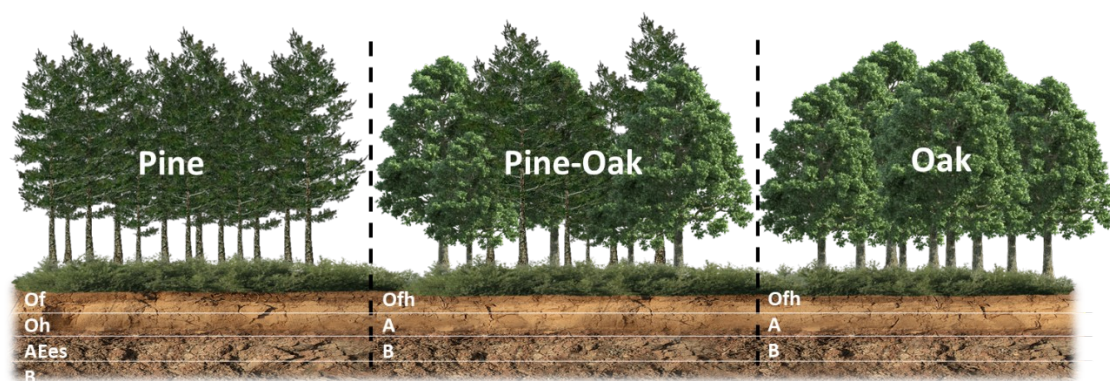


**Fig. 1.** Location of the study area - Rybnik Forest District (Poland)

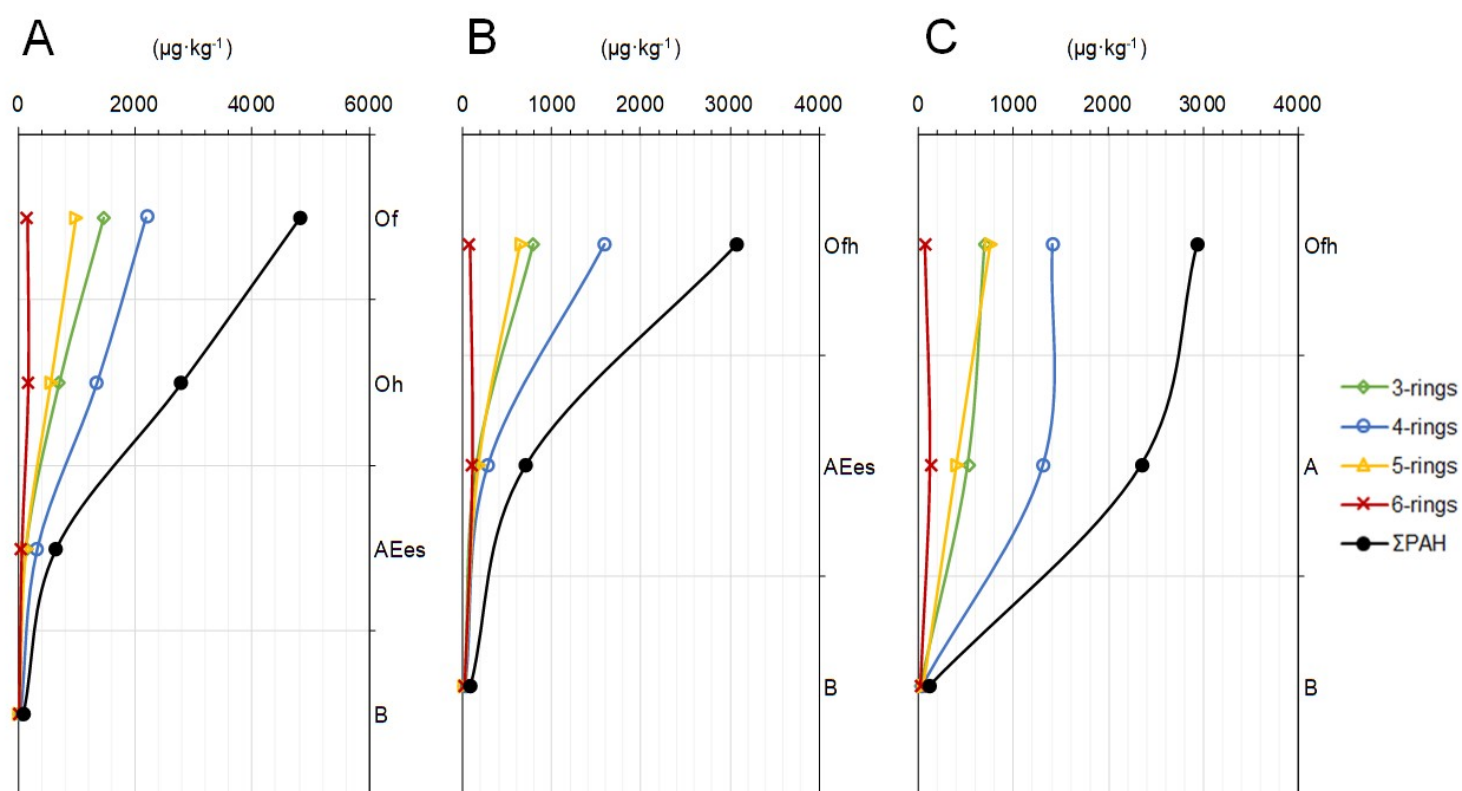


**Fig. 2.** PM<sub>2.5</sub> and PM<sub>10</sub> annual mean in 2018 from the European Monitoring and Evaluation Programme (EEA 2020), the test area is marked with a square.

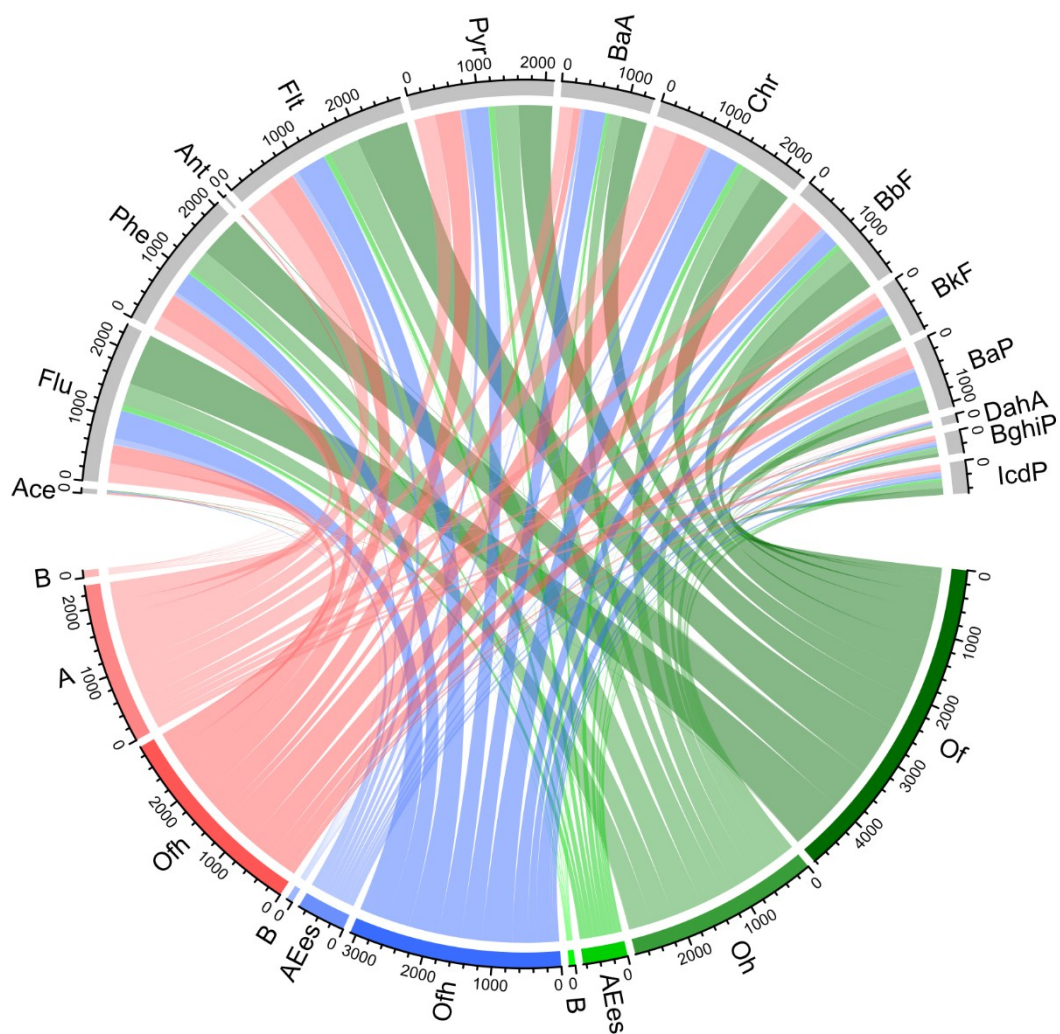




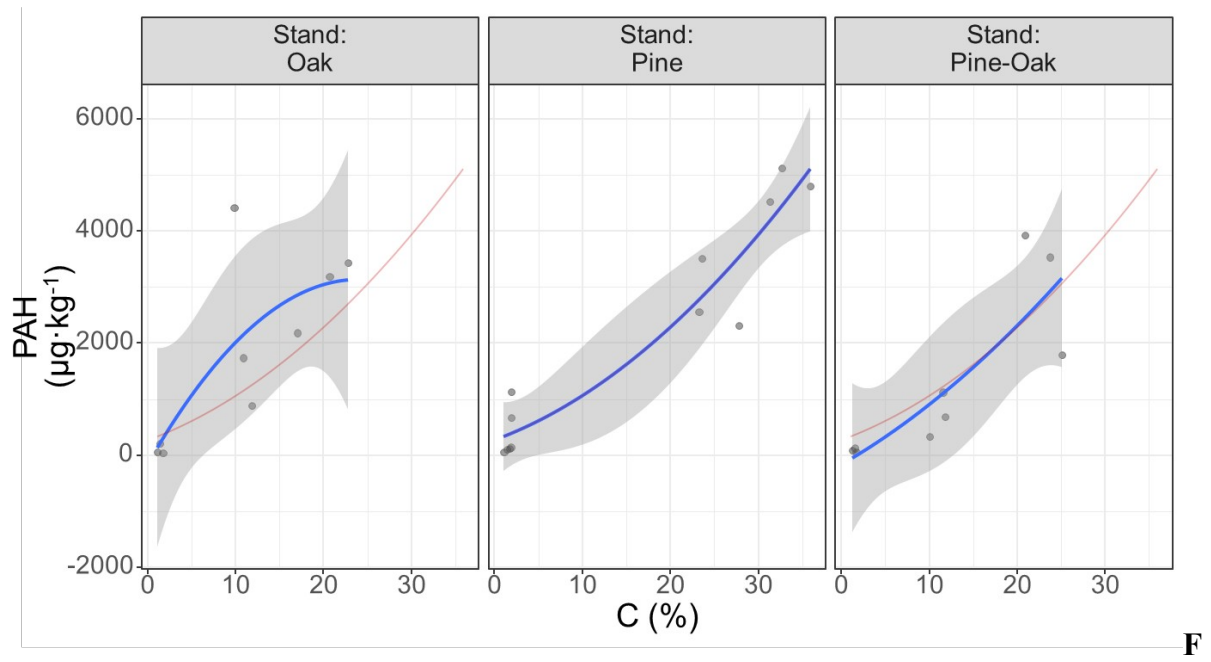
**Fig. 3.** Scheme of soil sampling in different forest stands.



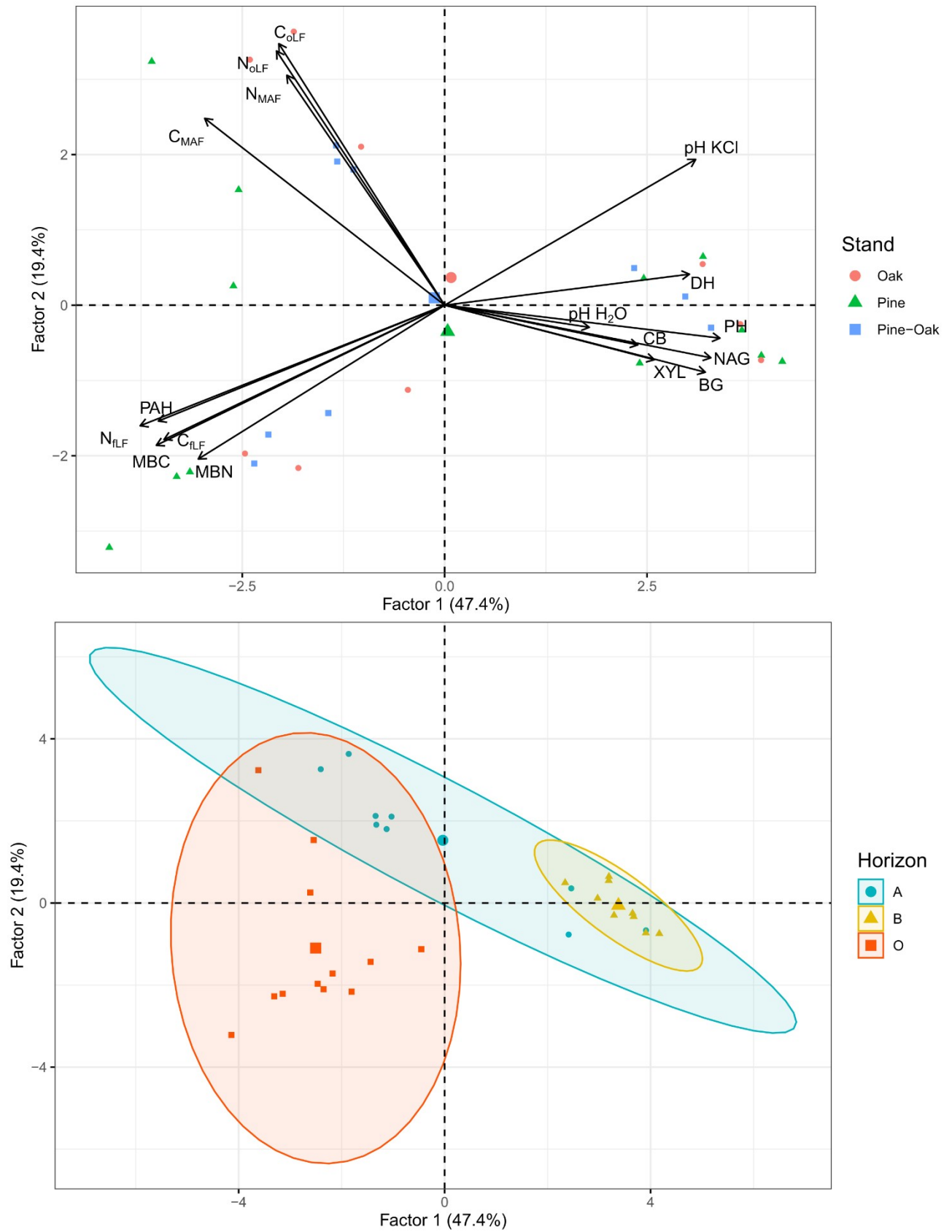
**Fig. 4.** Average PAH content in relation to the number of rings in different soil horizon of the pine (A), pine-oak (B) and oak stands (C).



**Fig. 5.** The chord diagram shows the average amount of PAHs ( $\mu\text{g}\cdot\text{kg}^{-1}$ ) in soil horizons of the tested forest stands (green – pine stand, blue – pine-oak stand, red – oak stands).



**ig. 6.** Dependence scatter plots of the content of C and the content of PAH in soils of the tested stands (the background around the regression line indicates a 95% confidence interval and the red line means the pine stand regression line).



**Fig. 7.** Projection of the variables on the factor plane.