

## **Changes in the staple structure of Polish Heath sheep covered by the Genetic Resources Conservation Programme**

### **Summary**

Polish Heath is a native breed of sheep associated with the north-eastern borderlands of Poland. It is one of the Northern European short-tailed sheep. As a native breed, it is a valuable element of biological diversity in Poland. For this reason, together with many other sheep breeds in Poland, it is included in the Genetic Resources Conservation Programme. Due to the lack of objective studies of the hair coat of these sheep, it is not possible to fully compare its features to the breed standard. The aim of the present analysis of Polish Heath wool and comparison of the results with previous research results was to determine changes that have taken place in the staple structure in the breed. Changes were noted in the proportion of individual fibre fractions. The proportion of the medium fraction increased, while the proportion of the medullated fraction decreased. The ratio of down hair to medullated fibres remained consistent with the breed standard. Over the years, the fibres have shown a tendency to thin in all fractions of the staple except the down fraction, whose thickness does not differ from the standard. The thinning of the wool did not lead to any changes in the length of the fibres within the staple fractions of Polish Heath sheep.

**KEY WORDS: Polish Heath sheep, staple structure, down fraction, medullated fraction, atypical fibres**