Performance recording for German Mutton Merino Sheep in Saxony-Anhalt

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Introduction

The German Mutton Merino is a sheep breed derived from fine-wool Merino sheep at the turn of the 19th and 20th century. Although this breed is still of the fine-wool type, under today’s German conditions the main emphasis in the breeding goal is on lamb and meat production. Within Germany, the German Mutton Merino is only a small breed with today 7,744 breeding ewes of which 5,820 head are kept in the state of Saxony-Anhalt.

Data and recording

Performance recording up to now is mainly carried out as a station test. With the present study, relationships between station performance test and a field test are examined. Data for this study consisted of results from 91 lambs of which the performance was recorded in the test station in the form of a progeny test (2009-2012) and 590 lambs with progeny test records from a field test (2012). From the station test, the traits recorded included fattening traits as well as slaughter data. In the field test, only lifetime daily gain (LDG) and ultra-sound measurements (US) of muscle depth as well as fat depth were available.

Results

On station, LDG was 373 g while in the field test 317 g were achieved. US muscle depths were 2.97 cm and 2.32 cm, for station and field tests, respectively. For US back fat thickness the corresponding values were 0.55 cm and 0.52 cm.

To compare station and field performance test only lambs of rams who had taken part in both systems were involved. In a mixed sire-model the birthtype (one or more), herd (5) and kind of performance test were included.

<table>
<thead>
<tr>
<th>Performance Test (665 lambs of 12 rams)</th>
<th>LDG (g/d)</th>
<th>US back fat thickness (cm)</th>
<th>US muscle depths (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field (n=582)</td>
<td>347.18 (11.21)</td>
<td>0.51 (0.02)</td>
<td>2.37 (0.04)</td>
</tr>
<tr>
<td>Station (n=83)</td>
<td>368.71 (11.88)</td>
<td>0.53 (0.02)</td>
<td>2.96 (0.05)</td>
</tr>
</tbody>
</table>

Conclusion

The breeding goal of LDG with 350 to 400 g for German Mutton Merino was reached under good management conditions in the station. Lambs grew more slowly if they grazed on extensive pasture – and this is usual in Germany. Due to the difference in environmental conditions an additional field performance test is recommended. For an endangered breed like German Mutton Merino the preservation of the breed is equally important as achieving substantial genetic trends.