

## Effects of pasture keeping and acorn feeding on growth, carcass- and meat quality of SH pigs

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The Schwäbisch-Hällisch pig (SH) is the oldest autochthonous pig breed in Germany. It has been rescued through a regional marketing program. The traditional feedstuff acorn was revitalized through a premium meat program where outdoor reared pigs get an acorn supplementation. In this study, the effects of pasture keeping and acorn supplementation on growth, carcass composition and meat quality traits of purebred SH pigs were investigated. In 2015 and 2016 in total 305 pigs were introduced to the trial when entering the fattening barn with an average weight of  $34\pm 6$  kg. The final live weight was  $138\pm 14$  kg with an average slaughter weight of  $107\pm 12$  kg. Up to a live weight of 91 kg all pigs were fattened under equal conditions. They were kept in a barn with outdoor access, a total place allowance of  $1.7\text{m}^2$  per animal and a cereals soya bean mixture as feed (ad lib.). After division in three trial groups one group went to pasture where every animal had a place allowance of  $400\text{m}^2$ . The pasture was equipped with huts and a water-/feeding station. The outdoor group (OA), represented by 57 pigs, was fed with a cereals soya bean mixture which was supplemented with dried acorns (20%). The indoor group with acorn supplementation (IA) consisted of 58 pigs and got the same feed as the OA group. As a control group (IC) 190 pigs were fattened indoor without acorns. All animals were fed ad libitum. All feeds had common energy- and protein levels (appr. 13 MJ-P; appr. 17% CP). Regarding growth performance the OA pigs showed significant lower daily gain than the other groups in the last fattening period (704g vs 789g (IA) and 785g (IC)). The OA group had with 2.9% a significant higher intramuscular fat content (IMF) than the IC group (2.3 %) while the IA animals reached 2.7 % IMF. The OA group showed significant lower drip loss values than the others (OA=0.9% IA=1.7% IC=1.7%). In conclusion pasture keeping reduces growth performance but improves meat quality. Acorn supplementation also has a positive effect on meat quality traits.

\*Funded by European Union H2020 RIA program (grant agreement No 634476).