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ARTICLE

Effect of Grape Seed Extract, *Cistus ladanifer* L., and Vegetable Oil Supplementation on Fatty Acid Composition of Abomasal Digesta and Intramuscular Fat of Lambs

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Thirty-six lambs were used in a 6 week experiment to evaluate the effect of vegetable oil blend supplementation (0 vs 60 g/kg of dry matter (DM)) and two dietary condensed tannin sources, grape seed extract (0 vs 25 g/kg of DM) and *Cistus ladanifer* L. (0 vs 250 g/kg of DM), on fatty acid (FA) composition of abomasal digesta and intramuscular polar and neutral lipids. Grape seed extract did not affect the FA profile of abomasal digesta or muscle lipid fractions. *C. ladanifer* had a minor effect in lambs fed diets with no oil but greatly changed the abomasal and muscle FA profiles in oil-supplemented lambs. It decreased 18:0 and increased 18:1 *trans*-11 in abomasal digesta and increased 18:1 *trans*-11 and 18:2 *cis*-9,*trans*-11 ($P = 0.062$) in muscle neutral lipids, resulting in an important enrichment of meat 18:2 *cis*-9,*trans*-11 when compared to other oil-supplemented diets (19.2 vs 41.7 mg/100 g of muscle).

KEYWORDS: Abomasal digesta; biohydrogenation intermediates; condensed tannins; fatty acids; lamb meat; oil supplementation

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