In vitro digestibility of Posidonia oceanica banquettes: Its role as a forage fibre source


Departamento de Patología Animal, Facultad de Veterinaria, Universidad de Santiago de Compostela, 27002-Lugo, Spain

*Departamento de Medicina y Cirugía Animal, Facultad de Veterinaria, Campus de Elviña, 30071-Murcia, Spain

Instituto de Cantería de Montaña, CSIC-ULE, Finca Marzanas, 24346 Grulleros-León, Spain.

Taking into account the aforesaid nutritional characteristics of P. oceanica...

We decide to advance in the nutritional characteristics and the role of this product as forage fibre source for ruminants.

Six samples were analyzed for residues of leaves P. oceanica collected on the beaches of tourist interest in the region of Murcia (SE Spain):

After a drying process, these samples were sent to the Instituto de Cantería de Montaña (CSIC, LCN).

With the aim to advance in the nutritive value of P. oceanica the rumen disappearance of DM, organic matter (OM), CP and NDF were studied.

One sample of P. oceanica was incubated in situ for 72 hours in 4 rumen cannulated Charro breed adult ewes.

Ewes received a standard diet 60/40 forage/concentrate ratio. The sample incubated was oven dried at 60°C and milled pass a 4 mm screen. Nylon bags were of 160 mm x 100 mm size, with a pore size of 40 μm. Bags were filled with 5 g DM of P. oceanica and tied with a nylon thread which was directly attached to the cannula plug. One bag was incubated/ewe.

The disappearance of DM, OM, CP and NDF at 72 hours was 35.48%, 28.18%, 26.80% and 29.84%, respectively.

These values of rumen disappearance at 72 hours could indicate digestive utilization of P. oceanica and are similar those obtained for other fibrous foods such as cereal straw, so that food can be an alternative to traditional sources of fiber in the diet of ruminants under intensive production systems in Mediterranean areas such as beef cattle or lambs feedlot.

The authors wish to express their gratitude to the CESPA (FEDER/UE) for the financial support received for carrying out this work, and Councils in S. Junior and Cartagena (Murcia, SE of Spain) for the facilities provided for the study.

*Corresponding author.