

## Assessment of Potential Spontaneous Plants Seed Dispersal in Camels and Small Ruminants Faeces

**Authors :** H. Trabelsi, A. Chehma, I. Benseddik

**Abstract :** Animals can play an important role in the seed dispersal cycle through the active or passive uptake of seeds and the subsequent external (epizoochory) or internal transport (endozoochory) of seeds. In Algeria, small ruminants and camels are generally conducted in extensive livestock exploiting the Saharan and steppe rangelands. To get an idea on the ecological potential role of these animals in the spontaneous plants proliferation, we propose to make a study of seeds dispersal and germination possibilities by camel faeces compared to those of small ruminants. Manual faeces decortication of the two animals categories has allowed to inventory 72 seed which 71% are in good condition, while 29% of the seeds that are encountered are partially altered and could not be identified. The species that have been identified, from small ruminants dung are weeds of cultures, while those identified from camel dung are spontaneous plants of Saharan rangeland. Concerning germination in the laboratory, only 3 species seeds were germinated from camel feces, whose germination rate varies from 25% to 100%. Contrary to Sheep-Goat feces, a single species germinated with 71%. The three months seed germination in greenhouse allowed to identify 10 species belonging to 4 botanical families (5 species from small ruminants dung and 3 species from Camel dung). In general, the results show the positive effect played by two animals categories for plants seed dispersal with the camel particularity for spontaneous plants due to its capacity to cover long distances in different rangeland types.

**Keywords :** Algeria, camel, endozoochory, seeds, sheep-goat, rangeland

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