

RUMEX SPECIES AN ALTERNATIVE FEED SOURCE OF NUTRIENTS FOR LIVESTOCK

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Abstract

Searching and finding low-cost natural nutritional solutions high in bioactive nutrients is imperative on today's livestock. Genus Rumex includes about 150 species of annual, biennial and perennial herbs distributed mostly in temperate areas, including Romania. As reported by some authors, dry matter (DM) and crude fibre (CF) concentration of this plant can gradually increase from spring to first cut in June and fat concentration is similar to alfalfa and maize. Rumex spp. leaves can be considered as a phytoadditive with antioxidant, antibacterial and antiparasitic properties, anticoccidial and antiinflammatory activities. The benefits of plant are due to its chemical composition: anthraquinones, tannins, flavonoids and phenolic acids. Some of these compounds have shown anti-inflammatory and antioxidant effects. This natural alternative source of nutrients can be collected from its natural habits and can be recommended as a valued medicinal herb and appreciated culinary vegetable. Some studies concluded that Rumex spp. can be used as fodder for livestock with real benefits effects on production performances, intestinal health, serum parameters and milk composition. Several broilers' studies noticed positive effects of patience dock on growth performances, duodenal morphology, serum thyroid hormones, and cecal microbiota. Taking into consideration the reported positive effects of Rumex spp. a dietary moderate inclusion in animal feed can be recommended.

Key words: *Rumex species; bioactive compounds; phytoadditive; microbiota; livestock*