

Comparison of Methods of In Vitro Dry Matter Digestibility for Ten Feeds

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The objectives were to determine if the in vitro dry matter (DM) digestibility was similar by using a traditional method compared to the new DAISY^{II} system and to determine if in vitro DM digestibility was similar for sources of inoculum from two different donor cow diets, all forage or total mixed ration. Ten feeds were digested by the traditional method, the DAISY^{II} method with same feeds in a digestion vessel, and the DAISY^{II} method with different feeds in a digestion vessel. The study used a 2 x 3 factorial arrangement of treatments with two sources of inoculum and three methods. The study was replicated. Source of inoculum affected in vitro DM digestibility; the grass hay donor cow diet resulted in lower digestibility values in six of the 10 feeds tested. Method did not significantly affect the digestibility values, and there were no significant source by method interactions. The DAISY^{II} method can be used to increase labor efficiency in the in vitro DM digestibility analysis, and forages and grains can be analyzed together in a single digestion vessel.

Key Words: in vitro • digestion • forages • grains

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