

Summary

The effect of saliva on magnesium (Mg), copper (Cu), zinc (Zn), and manganese (Mn) content in forage samples obtained from esophageal-fistulated steers was determined at the Centro Nacional de Pesquisa de Gado de Leite (EMBRAPA/CNPGL), Coronel Pacheco, Brazil. Two experiments were conducted. In experiment 1, animals in stables were given

chopped molasses grass (*Melinis minutiflora*) and elephant grass (*Pennisetum purpureum*). In experiment 2, elephant grass and a mixed pasture of molasses grass, sourgrass (*Paspalum* spp.), and *Paspalum notatum* were used in grazing.

In experiment 1, the levels of Cu in the samples obtained from the fistula were similar ($P > 0.05$) to those of the grass offered to the animals. In experiment 2, with the associated pasture, the levels of Cu and Mg in the samples obtained from the fistula were similar ($P > 0.05$) to those of the samples collected via simulated grazing. The results make it possible to conclude that forage samples obtained from esophageal-fistulated animals are reliable for determining levels of Cu. Nevertheless, because of inconsistency in the results, it is necessary to conduct more work on the preciseness of this method for determining levels of Mg, Mn, and Zn.