As an alternative for giving a selenium supplement, intraruminal boluses of 3 and 10 g (total weight) were designed and tested in lambs and adult sheep. The ingredients were: sodium selenite (5.23%) as source of Se; to regulate its release and maintain its mass and density, Fe 68.77%; cutin 25%; magnesium stearate 1%. Eight Pelibuey lambs (6 months of age) were used in metabolic cages for 15 d. Later, they received T type ruminal cannulas, and were fed a diet low in Se (0.06 ¿g g-1); the treatments were as follows: a control group without Se, and a group supplemented with bolus of Se (3 g). In the performance trial test, 20 Columbia ewes were used: 10 in the control group and 10 that received bolus (10 g). In the lambs, the bolus released Se without affecting the ruminal pH (p>0.05). The model for the degradation of the bolus in time effect within the ruminal medium was: Weight (g) = 3.0106 ¿ 8-5(d) ¿ 2-6(d)2, (r=0.97). In the behavior test with the ewes, the bolus of Se increased the concentrations of blood Se by 22.6 and 72% at 60 and 90 d (p¿0.05). It is concluded that the intraruminal bolus used in this assay constitutes an adequate and reliable technology for correcting the deficiency of Se and maintaining adequate concentrations of Se in sheep.

Keywords
Selenium deficiency, supplement with bolus, sheep.