Abstract
The effect of feeding phosphorus in broiler chickens from non defluorinated raw rock phosphates, adjusted according their specific bioavailability was evaluated by growth and bone mineralization response. The phosphates were Riecito (RIO), Monte Fresco (MONTE) and Navay (NAVAY), with a relative bioavailability of 81.0, 68.0 and 68.1 %, respectively, in relation to a dicalcium phosphate (100%). At six weeks of age, body weight (g) and tibia bone ash content (mg.cc) were 2063.3 and 215.2, 1944.2 and 199.1, and 1700.5 and 197.6, respectively for the same order of the phosphates, being RIOs values were similar to DICAL (2051.6 g; 217.2 mg.cc) and greater (P < 0.05) than MONTE and NAVAY. Bone fluorine levels (ppm) were 1,145.6, 6,000, 8,333 and 14,925, for DICAL, RIO, MONTE and NAVAY, respectively

Keywords
Broilers, phosphates, phosphorus, bioavailability, weight, bone ash