

**CẢI THIỆN SỰ TIÊU HÓA VẬT CHẤT HỮU CƠ VÀ SINH KHÍ *IN VITRO* BẰNG BỔ SUNG THÂN CHUỐI, CỎ ĐẬU LÁ LỚN (*Mucana pruriens*) VÀ TẮM GẠO ĐỐI VỚI CHẤT NỀN LÀ RƠM VÀ CỎ LÔNG TÂY (*Brachiaria mutica*)**

*Nguyễn Văn Thu và Nguyễn Thị Kim Đông*

**Khoa Nông Nghiệp, Trường Đại Học Cần Thơ**

Tác giả liên hệ: Nguyễn Văn Thu, Điện thoại: 0918 549422, Email: nvthu@ctu.edu.vn

**ABSTRACT**

**Improvement of *in vitro* organic matter digestibility and gas production by supplementing banana trunk, *Mucana pruriens* and broken rice to rice straw and *Brachiaria mutica* as the substrates**

A study including two experiments (Exp), was conducted at CanTho University to measure organic matter digestibility and gas production of some supplement feeds to rice straw and *Brachiaria mutica*. The Exp 1 was a completely randomized design with 6 treatments and 3 replications. The treatments were *Brachiaria mutica* grass, banana trunk, rice straw, 70% para grass (*Brachiaria mutica*)+ 30% banana trunk, 70% rice straw + 30% banana trunk, 70% rice straw + 30% *Mucana pruriens* (% DM). The Exp 2 was a 2\*3 factorial design with 3 replications. Factor 1 was basal feeds (including para grass and straw), while factor 2 was supplements consisting banana trunk, *Mucana pruriens* and broken rice. The results the Exp 1 showed that the OM digestibility (OMD) at 48 and 72 hours were the highest values for the banana trunk treatment. In Exp 2, gas production at 48 and 72 hours was significantly higher for Para grass (P<0.05) and the highest values for the broken rice. The OMD was significantly higher for the para grass than rice straw (P<0.05), and the highest values obtained was broken rice supplementation at 72 hours (P<0.05). There was a linear relationship between OMD and gas production found and the regression equation was  $y = 0.703x + 24.4$  with  $R^2 = 0.80$ . It was concluded that supplementing banana trunk, *Mucana pruriens* and broken rice to rice straw or *Brachiaria mutica* grass improved the dietary nutrients and digestibility and gas production.

**Key words:** *In vitro* gas production and digestibility, roughages, legume, soluble carbohydrate.