

Summary

In a Vertisol under experimental field conditions at the Isthmus of Tehuantepec, Oaxaca, Mexico (lat. $16^{\circ} 25'$ N and long. $95^{\circ} 00'$ W, 18 m.a.s.l., 24°C average temperature, and 1008 mm annual rainfall), persistence and grazing compatibility were measured over the period of a year for the association *Digitaria decumbens*/*Clitoria ternatea* under three stocking rates (high = 4 animals/ha; medium = 3 animals/ha; and low = 2 animals/ha) and two grazing systems (7 days grazing and 35 days rest; and 5 days grazing and 25 days rest).

Evaluations on dry matter (DM) availability and the pasture's botanical composition were performed in April 1985, coinciding with the end of the dry windy period; July, which coincided with the onset of the rains; November, which is the start of the windy period; and March 1986, the windy period which corresponded to the experiment's final stage.

Results showed that the grazing systems used and their interaction with the evaluation periods did not have a significant effect on the DM availability of the association. Conversely, the period significantly ($P \leq 0.5$) affected DM availability of both the grass and the legume. Both species gave their highest DM production in July. The windy period adversely affected the legume but not the grass which was adversely affected by dry conditions. Low stocking rates favored higher DM availability in the association. In medium and low stocking rates, the highest percentage of *C. ternatea* was obtained with 5 days grazing followed by 25 days rest; in high stocking rates this occurred with 7 days grazing and 35 days rest.