

Summary

Rotations and relay-cropping systems of rice and pastures have demonstrated potential for improving soil fertility, maintaining soil structure and increasing rice yields in the lowland Neotropical savannas. The major components of these cropping systems, rice and forage grasses,

share susceptibility to two major insect pests: species of Cercopidae known as spittlebugs, and leaf-cutter ants (*Atta* and *Acromyrmex* spp.)

This article describes work on the control of these pests through cultural practices and host plant resistance. Management strategies are proposed to minimize losses. Cercopids can be controlled to a limited extent through strategic grazing although the development of resistant hybrid *Brachiaria* cultivars offers the greatest potential for effective control. Resistance to leaf-cutters is also present in the genus *Brachiaria*. Methods to assess populations of leaf-cutter colonies are described as well as damage to susceptible grass cultivars. Estimation of colony density prior to planting is recommended in order to select the proper grass cultivar.