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Prospects for the Biological Control of *Cyperus rotundus*, Purple Nutsedge, in Brazil

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Cyperus rotundus, a highly aggressive species adapted to a variety of abiotic situations, is one of the 10 worst weeds of the world. In Brazil, large areas cultivated with vegetables, cotton and sugar-cane are being invaded by this troublesome weed. We are investigating the possibilities for the biological control of purple nutsedge as an alternative to traditionally adopted control methods that are ineffective and expensive. From 1988-90, exploration of natural enemies was carried out in the South, Southeast, Central-west and Northeast regions of Brazil. A total of 78 insect species belonging to 9 orders, and 6 phytopathogen fungi genera (*Pestalotea*, *Cercospora*, *Curvularia*, *Fusarium*, *Chaetophoma* and *Mycelia*) were collected. Only 7 of the insect species developed on the plant during their immature stage. Of these, the stem borer, *Bactra* sp. (Lepidoptera: Pyralidae), presents good potential as a biological control agent for nutsedge. Preliminary observations indicate that this species has a great damage potential. A colony of *Bactra* sp. was established in the laboratory to be used in green house tests of specificity and effectiveness. The fungi isolates are being selected to be used in association with *Bactra* sp. to control nutsedge.