



Bahia State University



NEPPA
Animal Science Research
and Extension Center



**Dung beetle for parasites
control in farm animals**

The program was initially as an exclusive extension project. Basically, the objective was to establish a colony of the African dung beetle (*Digitonthophagus gazella*) in our campus and release the beetles in our region to control parasites, mainly horn fly (*Haematobia irritans*), a major concern for the livestock production.

However, to discover more about the biology of the beetle, studies were conducted in the lab. After release thousands of beetles, traps were mounted to recapture the beetles and a survey were done with the producers. In some ranches, the beetle recovery rate was low. Analyzing the survey results, we could notice the parasite management, mainly regarding the type of drug used, affect the dung beetle population. We used the results to educate the producers about the ecology of the beetles and the biology of the parasites, toward the utilization of strategic control with products no harmful to the beetles.



The Superbeetle project was improved with the partnership with Sao Paulo State University allowing the research to expand to native dung beetles. The richness and biodiversity of the native dung beetles were studied in western and southern Bahia.



The project was very successful with many publications on internet, radio and TV interviews. In the region and in my university, people used to call me “Professor Dung Beetle”. I was proud to be the “ambassador” of dung beetles and spread their importance for ecology and agriculture.

Superbeetle Project in the media:

<https://www.youtube.com/watch?v=gbPo2Hbtu64>



<https://www.agrolink.com.br/noticias/besouro-e-usado-para-controlar-parasitos-dogado-82990.html>

<http://livrozilla.com/doc/464958/benef%C3%ADcios-dos-besouros-copr%C3%B3fagos-%C3%A0-pecu%C3%A1ria-danilo-gusm...>

<http://agropecuarianutriverde.blogspot.com/2009/01/besouro-e-usado-para-controlar.html>

Benefícios dos besouros coprófagos à pecuária

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Resumo:

Os besouros coprófagos são insetos que se alimentam exclusivamente de excrementos de mamíferos, tanto as fêmeas adultas, quanto larvas. Desde os hábitos alimentares, estas moléculas são capazes de atuar na cultura de microrganismos, parasitas, insetos e ácaros, promovendo a descontaminação e decomposição dos fezes.

O grande interesse da pecuária e dos produtores por besouros coprófagos se deu a partir de 1980, com a observação de que milhões de toneladas de excrementos de bovinos acumulados anualmente na superfície das pastagens ocasionavam a grande quantidade de fezes acumuladas na superfície do solo promovendo a perda de pastagens (projeção de imagens satelitais com excrementos), e o aumento de níveis de febrilidade e resacas (principalmente a "doença do zifera"), prejudicando as



BIODIVERSIDADE DE COLEÓPTEROS COPRÓFAGOS EM TRÊS DIFERENTES ÁREAS DO SUL DA BAHIA

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IMPORTÂNCIA AGRONÔMICA DE COLEÓPTEROS COPRÓFAGOS

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