Abstract

Chagasin may be considered a potential plant-incorporated protectant (PIP) protein due to its deleterious effects on insect pests. However, extensive safety studies with PIP’s are necessary before introducing them into the target plant. Thus, a short-term feeding trial in rats with high doses of r-chagasin was conducted to provide evidences about its safety. Three test diets containing casein + r-chagasin (0.25, 0.5 and 1% of total protein) were offered to rats (10 days). The test diets did not show adverse effects upon the development, organ weight, hematological parameters and serum protein profiles of rats, providing preliminary information on the safety of r-chagasin.

Keywords

Chagasin, recombinant protein, hazard potential, short-term rat feeding trial.