

Title            Augmented release of *Teretrius nigrescens* Lewis (Coleoptera: Histeridae) for the control of  
*Prostephanus truncatus* (Horn) (Coleoptera: Bostrichidae) in stored cassava chips

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### Abstract

A trial was set up in northern Benin to evaluate the potential of *Teretrius nigrescens* to reduce the infestation and damage to cassava chips caused by storage insects. Cassava chips were stored for 5 months in mud silos and 50 adults of *T. nigrescens* were added when the stores were first filled. Stores where no predator was released were monitored as controls. The main storage insects observed were *Prostephanus truncatus* and *Dinoderus* spp. Initial chip weight varied between 102 and 246 g with no difference between treatments. Chip weight and number of holes on chips initially differed between treatments after 2 months of storage. After 3 months of storage, losses reached 40–50% without *T. nigrescens* and 30–40% when cassava chips were stored with *T. nigrescens*. A farmer can increase his profit by 1437 Fcfa/100 kg (1\$=560 Fcfa, 1£=968 Fcfa; 1€=656 Fcfa, as on 2 December 2005) through the use of *T. nigrescens* because losses are reduced by 11%. Data analysis showed that there were significant differences ( $P<0.0001$ ) between the two treatments for the number of holes, number of insects, weight of each chip as well as damage. There were twice as many *P. truncatus* and holes on chips in stores where *T. nigrescens* was not released. The addition of the predator to farmers' stores is an economic option for controlling losses due to insects in cassava chips.