Introduction. Rhodnius colombiensis is a sylvatic triatomine associated with wine palm trees (Attalea butyracea) in the high basin of the Magdalena river (Colombia). The frequent invasion of these vectors into human dwellings and the high prevalences of natural infection with Trypanosoma cruzi of these insects suggest an important role in the transmission of Chagas disease. Objective. The length of the life cycles of R. colombiensis and R. prolixus under laboratory conditions were compared. Materials and methods. Ninety-two individuals for each species were studied. The mean duration time of each stage, the number of bloodmeals for each stage, the percentage of mortality, the cause of death, the mean of eggs laid by female, the number of fertile eggs and the longevity of adults were recorded. Results. The mean duration time of all stages of R. colombiensis was higher than in R. prolixus, producing significant differences in the overall time from egg to adult. The mean of total eggs and fertile eggs showed significant differences, being higher in R. prolixus than in R. colombiensis. The total mortality was 31.5% for R. colombiensis and 6.5% for R. prolixus. The longevity of females was higher in R. prolixus. Conclusions. The stages of R. prolixus are of relatively short duration. In general, the nymphs take fewer bloodmeals than R. colombiensis, the adults take more bloodmeals and oviposit a larger number of fertile eggs, and females have a greater longevity. These parameters indicated that R. prolixus has superior reproductive success in comparison with R. colombiensis under the experimental conditions used. These new life cycle data of R. colombiensis will be useful for maintenance of laboratory colonies.

Keywords
Rhodnius, life cycle stages, longevity, mortality rate.