

New evidence for seed transmission of reptiles in arid areas of China

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Abstract

Abstract: Diet and trophic niche of *Teratoscincus roborowskii* was analyzed by pellets analysis technique. A total of 263 pellets of *Teratoscincus roborowskii* were collected from the Turpan Botanic Garden in Turpan City from July to October, 2016, . Food composition and proportion of *Teratoscincus roborowskii* were identified by comparative analysis. The number of food components in the fecal samples was identified, and the numeric frequency, biomass ratio and frequency of occurrence of each component were counted and then the monthly Shannon-wiener diversity index, Shannon evenness index and diet niche width were analyzed. The results show that the *Teratoscincus roborowskii* mainly feed on insects and caper fruit in the Turpan Botanic Garden. Insects are the most common food for the *Teratoscincus roborowskii*, the frequency of occurrence which in each month is the largest; caper fruit was the most food intake in July and August, and that of insects is the most one on September and October. There are some differences in the composition of food in different months, which may be related to changes of food availability. The results of the feeding habit analysis show that the *Teratoscincus roborowskii* may play an active role in the dispersal of caper seed.

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