Abstract During a study conducted in north-west parts of Mazandaran province (around Caspian Sea areas), Paederus fuscipes was found. The adults Paederus started to appear in May and lasted until October. However they lived up to 12 months, and they spent 6-8 months in hibernation according to different localities. Black ray was most attractive to adult beetles and they showed highest daily activities between 21-22 hours at night. During daytime at lower relative humidity and less intensive sunshine, they can be observed on the surface of leaves near the water reservoirs. The peak of their highest seasonal activities accurately corresponds with the occurrence of the linear dermatitis among local residents. Apparently, the linear dermatitis is responsible for up to 54% of all sorts of dermatitis in north-west parts of Mazandaran province (Iran). The peak time of the problem was in September with the face and neck as the most common parts affected.