Mammillaria pectinifera (Cactaceae) is an endemic species from the Tehuacán-Cuicatlán region at the Mexican States of Puebla and Oaxaca. Although it is considered as a threatened species under Mexican law NOM-059-ECOL-2001, and it is already included in the CITES Appendix I, ecological studies reveal serious vulnerability to extinction of its populations. In this study, we conducted an extinction risk assessment for M. pectinifera based on the protocol of the Method for Evaluation of Risk of Extinction for Mexican Wild Species (MER) from Appendix I of NOM-059-ECOL-2001, which is based on a qualitative assessment of 4 criteria for evaluating extinction risk of any wild species in the Mexican territory. The present assessment relies on data from field studies on 7 populations as well as information from several sources. The MER assessment resulted in a risk score of 12 points and, accordingly, we propose to consider M. pectinifera as a species under extinction risk (P) in NOM-059-ECOL-2001. Also, it should be included again in the Red List of IUCN. Finally, we suggest ways for improving the assessment of Criterion D of the MER.

Keywords
Disturbance, distribution, rare species, MER, vulnerability.