Abstract

The results of the analyses performed on the decorative cornice limestone of building 5N2 in group A at Río Bec are presented, with the finality of determining the causes, mechanisms and effects that weathering promotes. These processes haven't been well studied for the southeast of Campeche, the region in which the archeological zone of Río Bec is located. Knowledge of these mechanisms is necessary for the subsequent conservation of the prehispanic buildings of the region. The stones of the cornice presented different conservation states; therefore, samples were taken from each of the disintegration states identified in field. These samples were studied in thin section, and by scanning electron microscopy and X ray diffraction. The results show many weathering features due to chemical processes; among the most notorious is the transformation of micrite to acicular crystals. These effects are similar to those that take place in edaphologic contexts that present calcium carbonates associated with water, decaying organic matter, fungus and roots. The composition of the rocks in conjunction with the archeological context and other environmental factors determined the different states of disaggregation found in the limestone of the cornice.

Keywords

Limestone, weathering, disaggregation, Mayan zone.