THE CRYSTAL STRUCTURE OF DESTRUXIN B. By J. L. Rios Steiner and C. L. Barnes, Department of Chemistry, University of Puerto Rico, Río Piedras, P.R., U.S.A. 00931.

The destruxins are a family of cyclohexadepsipeptides produced by the entomopathogenic fungus Metarrhizium anisopliae (Pais, M., et al., Phytochemistry, 1981, 20, 715-723). The molecular structure of Destruxin B, a member of this family, is shown below. The backbone conformation of Destruxin B is very similar to that of Roseotoxin B synthesized by Troels la Cour, Department of Chemistry, Aarhus University, Denmark.

Endothiopeptides are oligopeptides in which one or more oxyacyl moieties in peptide groups are replaced with thioacyl moieties. The use of thiopeptide analogs of naturally occurring peptides could be of benefit in the study of structure/function relationship in enzymic catalysis. Another application of this type of peptide modification is in the field of medicinal chemistry, since the digestion pattern of thiopeptides is different from that of normal dietary proteins.

Intensity data were collected on an Enraf-Nonius Cad4 diffractometer at room temperature using CuKα radiation to 2θmax = 150°. The structure was solved using Direct Methods and refined to a final unweighted R of 5.1% for 7074 observed reflections (D30(I)).