

- Document Type** : Thesis
- Document Title** : Synthesis and biotransformations of some ring a and d substituted steroids by mucor plumbeus
بواسطة الفطر D و A الاصطناع والتحويلات الحيوية لبعض الستيرويدات المستندلة في الحلقة
موكور بلامبيوس
- Document Language** : Arabic
- Abstract** : The application of enzymes as reagents to bring about chemical reactions, is one of the fastest growing areas of research. The ability of enzymes to perform reactions under mild conditions, with a good regio- and stereospecificity, offers a valuable Potential for the production of chiral molecules in such diverse applications as synthesis of natural products, in medicinal chemistry and in the synthesis of drug metabolites. It is well known from the literature that the position and the stereochemistry of the substituents have an important role in the biotransformation results. In this work we will limit our studies to the effect of the position and stereochemistry of an epoxy group and nitrogen containing group (hydrazone) on the biotransformation results . The first chapter of the thesis provides a brief review of the literature concerning the microbiological hydroxylation of natural products using fungi cultures. The synthesis of the substrates the epoxy steroids and the steroidal hydrazones form the subject of chapter two. The biotransformation of the epoxy steroids along with steroidal hydrazones by Mucor Plumbeus are described in chapter three. The compounds were identified by spectroscopic methods. The ¹³C NMR spectra assignments of the compounds prepared during these studies are given in the appendix A.
- Supervisor** : د. خالد عمر الفتوي
- Publishing Year** : 2007