The thermophilic fungus *Thermomyces lanuginosus*: the occurrence and the properties

**Abstract:** The thermophilic fungi are wide propagated and they were isolated in the all of climatic areas. The most widespread are the species *Thermomyces lanuginosus*. The species of the thermophilic fungus *Thermomyces lanuginosus* were isolated from the composts, the hay, the mushroom compost, the bagasse, the sawdust, the peat, the air, the maize, the gram, the peanuts, the kemeł palms, the popular local food in Egypt and the different soils. These fungus have the minimum temperature for the growth and the development 25—37°C, optimum 40—55°C and maximum 55—63°C.

The studies proved the ability of the species of this fungus to the biosynthesis many of the hydrolytic enzymes. Thanks to this properties *T. lanuginosus* can putrefy the matter containig carbohydrates, proteins and lipids. Species of the *T. lanuginosus* have also the ability to the growth in the presence some of the hydrocarbons. In this connexion, it is not unlikely, that enzymes produce by *T. lanuginosus* can be used in the industry for example in the alimentary or paper industry. In spite of small publications about the toxygenic properties of this fungus, we can not belittle this fact.

1. Introduction. 2. The discovery. 3. The morphological characteristic. 4. The cardinal temperatures. 5. The occurrence. 6. The biochemical properties. 7. Recapitulation