

عنوان مقاله:

Evaluation of biodegradability of polyethylene by isolated fungi

محل انتشار:

پنجمین کنگره بین المللی مهندسی شیمی (سال: 1386)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

The biodegradability of pretreated films of low density polyethylene (LDPE) by the isolated fungi *Aspergillus penicilliodous*, *Aspergillus terreus* and *Fusarium solani* was investigated under liquid media. Also their growth was investigated on compost media. Photooxidation was used as a pretreatment for biodegradation of low density polyethylene. Scanning electron microscopy (SEM), gel permeation chromatography (GPC), FT-IR spectroscopy were used to determine morphological, structural and surface changes on (LDPE). Progress of composting process was investigated by changes of total organic carbon and moisture. The results shows biodegradability of polyethylene by the isolated fungi and fungi growth on compost media.

کلمات کلیدی:

Low Density Polyethylene(LDPE); composting; biodegradation; fungi species

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