عنوان مقاله:

Synthesis and Insecticidal activity of benzylamino coumarin derivative

محل انتشار:

کنفرانس علوم کشاورزی و محیط زیست (سال: 1392)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

A simple method for the synthesis of benzylamino coumarin derivatives has been developed from secondary amines, aromatic aldehyde, and 4-hydroxy coumarin via Mannich type reaction inthe presence of BF3.SiO2, and Insecticidal activity of these compounds against Spodoptera litura wasobserved to be comparable to commercial pyrethroid insecticide, cypermethrin. The structure of the isolated compounds has been determined by means of 1H/13C NMR and FT-IR spectroscopy. Thismethod have some advantages such as good to excellent yield, mild reaction condition, ease ofoperation and workup, high product purity and green process. Spodoptera litura is a serious pest causing enormous losses to many economically important cultivated crops such as cotton, soybean,groundnut, tobacco and vegetables. Sometimes it has been found to cause 26–100% yield loss in thefield. Its control has depended mostly on application of various insecticides. As a result, many field populations of this pest have developed multiple resistances .and field control failure has been observed very frequently

کلمات کلیدی:

component; Synthesis; Insecticidal activity; benzylamino coumarin derivative; Spodoptera litura

لینک ثابت مقاله در پایگاه سیویلیکا: