

Isolation of flufuran

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Abstract

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Protocol

Step 1.

HQD-6 was fermentated on rice solid medium (to 100 g commercially available rice was added 110 mL of distilled water and kept overnight prior to autoclaving, 100 flasks) at room temperature under static conditions and daylight for 40 days.

Step 2.

The mycelia and solid rice medium were extracted with EtOAc (each 200 mL) and the combined EtOAc extracts were evaporated under reduced pressure to yield 62.0 g residue.

Step 3.

This residue was separated into seven fractions (Fr. 1- Fr. 7) on a vacuum liquid chromatography (VLC) on a short silica gel column using a step gradient elution of CH2Cl2/MeOH (v/v 0:100-100:0).

Step 4.

Fr. 3 (5.0 g) was rechromatographed on a silica gel column, eluted with petroleum ether/CH2Cl2/MeOH (5:5:0.1), to provide four subfractions (fractions 3.1-3.4).

Step 5.

Promising Fr. 3.3 (126 mg) was processed to further chromatographic separation using Sephadex LH-20 with CHCl3/MeOH (5:5:0.1) as eluent to afford flufuran (10.0 mg).