

عنوان مقاله:

High Energy Ultrasonification Preparation of Thyme Oil Nanoemulsion

محل انتشار:

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خلاصه مقاله:

In this study, nanoemulsion formulations of thyme oil were prepared by high energy method of ultrasonification. Then parameters of essential oil percentage, surfactant concentration and sonication time were studied to achieve minimum droplet diameter with high physical stability. The nanoemulsion formulations were then analyzed by measuring pH, viscosity, conductivity, dynamic light scattering, optical clarity and antibacterial activity. The results showed that the essential oil nanoemulsion system was resulted in nanoscale size of about 13 nm with high physical stability. The antibacterial effect of the formulated samples was evaluated by using disc diffusion method. The aim of this study was the use of thyme oil nanoemulsion as herbal medicine for the replacement of antibiotics and chemicals.

کلمات کلیدی:

Nanoemulsion ; Ultrasonic ; Essential Oil ; Thyme Oil ; Antibacterial

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