

عنوان مقاله:

The Effect of Aqueous Extract of Feverfew Plant (*Tanacetum parthenium* L.) on the Growth of *Lactobacillus Acidophilus* and *Bifidobacterium Bifidum* Bacteria in Probiotic Milk and Yogurt

محل انتشار:

مجله طب دامپزشکی جایگزین، دوره 4، شماره 11 (سال: 1400)

تعداد صفحات اصل مقاله: 14

نویسندگان:

مسعود حسینی - Department of Food Hygiene, Faculty of Veterinary Medicine, Kazerun Branch, Islamic Azad University, Kazerun, Iran

محمدحسین مرحمتی زاده - Department of Food Hygiene, Faculty of Veterinary Medicine, Kazerun Branch, Islamic Azad University, Kazerun, Iran

آرش پایه دار - Department of Biology, Kazerun Branch, Islamic Azad University, Kazerun, Iran

خلاصه مقاله:

Background and aim: Feverfew (*Tanacetum parthenium* L.) is a medicinal plant used in a wide range of diseases. However, the effect of this plant on the growth of probiotic bacteria has not been investigated yet. In this research, the possibility of producing food based on milk and probiotic yogurt with aqueous extract of feverfew plant was evaluated. **Material and Methods:** In order to determine the effect of different doses of aqueous extract of feverfew plant on the growth of probiotic bacteria *Bifidobacterium bifidum* and *Lactobacillus acidophilus* in the first stage (milk) and in the second stage (yogurt), 0.33 grams of lyophilized bacteria *Bifidobacterium bifidum* and *Lactobacillus acidophilus* were added separately to one liter of sterilized low-fat milk. Acidity, pH and microbial growth during greenhouse storage and shelf life were investigated and sensory evaluation was performed at the seventh day after the production of the products. Also, at the end of the study, cholesterol and triglyceride levels of rats were measured. **Results:** In the samples containing *Lactobacillus acidophilus*, *Bifidobacterium bifidum* bacteria was observed that increasing the concentration of aqueous extract of feverfew plant gave a favorable taste to the yogurt, and in all the samples, the yogurt had a very good consistency, and the yogurt with 0.1% feverfew plant had the best taste. In the evaluation of microbial culture, *Bifidobacterium bifidum* probiotic bacteria did not grow well on MRS Agar medium compared to *Lactobacillus acidophilus*. By examining the results, it was found that increasing the concentration of aqueous extract of Feverfew plant had a positive effect on the growth of probiotic bacteria *Lactobacillus acidophilus* and *Bifidobacterium bifidum* in probiotic milk and yogurt. Further, in order to evaluate the effectiveness of *Bifidobacterium bifidum* and *Lactobacillus acidophilus* probiotic milk products with different concentrations of aqueous extract of feverfew plant on the cholesterol and triglyceride levels of rats, investigations and experimental tests were carried out that the probiotic milk containing *Lactobacillus acidophilus* and also the probiotic milk containing *Bifidobacterium bifidum* containing 0.1% aqueous extract of feverfew plant had the greatest effect in reducing cholesterol. *Lactobacillus acidophilus* milk containing 0.1% aqueous extract of feverfew and *Bifidobacterium bifidum* milk containing 0.3% extract of feverfew plant had the greatest effect in reducing triglycerides in rats. **Conclusion:** Aqueous extract of feverfew plant has a ... positive effect o

کلمات کلیدی:

Aqueous extract of feverfew plant, *Lactobacillus acidophilus*, *Bifidobacterium bifidum*, Triglyceride, Cholesterol, Probiotic

عصاره آبی گیاه مخلصه، لاکتوباسیلوس اسیدوفیلوس، بیفیدوباکتریوم بیفیدوم، تری گلیسرید، کلسترول، پروبیوتیک

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1584328>



