

عنوان مقاله:

Oxidase enzymes extraction from iranian tea leaves and evaluation the influence of important parameters

محل انتشار:

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خلاصه مقاله:

Tea is an important natural product in the economic and cultural context of Iran. Peroxidase and polyphenol oxidase have been responsible for quality deterioration and browning in tea. This study aimed to evaluate the influence of buffer pH, solid-liquid contact time, buffer molar concentration, solid to liquid ratio, tween 80 addition and polyvinylpyrrolidone K90 (pvp) addition on peroxidase and polyphenoloxidase activities, in a crude extract of the fresh iranian tea leaves. For this reason, experiments was designed by Taguchi method. For PPO, activities up to 81.89 (U /mL) were obtained in the experimental level investigated, while for POD activities up to 5.40 (U/mL) were achieved. For PPO increasing pH and Tween 80 addition, had positive effect on enzyme activity while for POD decreasing pH and PVP addition presented higher activity

کلمات کلیدی:

tea leaves, peroxidase, polyphenol oxidase, taguchi method

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