

The Use of Ultrasound in the Intensity of the Color Complex in the Presence of Onion Extract

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ABSTRACT

Recently, ultrasonic applications, and trends of significant interest, as a side to the old method has attracted, In this study, using a complex, changing color and the amount Sediment in the onion extract (as dye) by ultrasound (ultrasonic probe - ultrasonic baths) will be reviewed. In this study, reducing the intensity of ultrasound Bat.

KEY WORDS: Ultrasound, Complex, Onion extract.

INTRODUCTION

Many years the great potential of ultrasound in a wide range of processes in the chemical industry and its related is obvious. Some of these applications have long been known and used [1-2-3], Some of them include:

- a) Degradation of macromolecules
- b) The production of grape juice

While others, such as the use of ultrasound in medical therapy have a significant change with new features. The effect of ultrasound on chemical processes, thus pairing the direct sound field at the molecular level is concerned with the chemicals. Chemical effects of ultrasound result is a cavity phenomenon. Making a tiny hole in a fluid cavity in which it occurs due to negative pressure [4], The precipitated dye is reduced in this study. Another application of ultrasound to investigate the change of color is complex in the presence of dye, the dye used in this study as onion extract.

METHODS

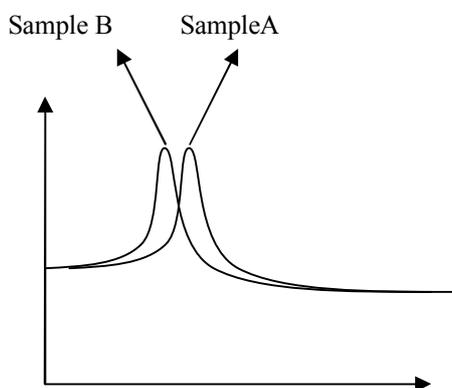
5g shell onions for 2 min at ambient temperature and placed in an ultrasonic bath (sample A), and 0.5g of time in the water, put the onion skins (sample B), Placing the samples A, B are in hot water extract of onions. Complexes $\text{Fe}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O} + \text{C}_2\text{H}_2\text{O}_4 \cdot \text{H}_2\text{O}$ to samples A, B are added.

Microscopic observations (the colored complex):

Sample A: the formation of small rings

Sample B: the normal fluid

Spectrum UV:



RESULTS

The study shows that ultrasound Bat reduce the intensity of A (only the onion extract), colors, and sample B has a pale yellow color is dark yellow, Samples A, B complex added simultaneously to the darkening of the pigment (color sample A, sample B has a pale to dark yellow color, dark yellow highlight) Applied by the sample A to sample B in Bath, ultrasound and adding complex intended to dye and beam ultrasound waves directly (by probe ultrasound) to the samples, the results suggest that sample A has a Sediment less than the B's.

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