

The Effect of Adding Aqueous Extract of Olive Leaves on Prolonging the Shelf Life of Arabic Bread

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Abstract. The purpose of this article is to rank potential methods for extending the shelf life of Arabic bread. The majority popular kind of bread consumed in world is Arabic bread (AB). It is made from wheat flour which is regarded as having little nutritional value, the phenols and moisture were assessed. This investigation looked at the shelf life of arabic bread that was kept at 25 °C for three days, using two levels of olive leaf extract 4 and 8%, at the end of the three-day storage period, The findings showed that the yeast-mold counts in control rose to 5.77 log CFU/g, However those that contain 8% OLWE showed lower value was 3.47 log cfu/g).beside the total bacteria in control rose to 5.95log cfu/g, while those containing 8% OLWE showed lower value than 3 was 2 log cfu/g), the OLWEs had a favorable impact on the wheat loaves' microbiological shelf life when they were kept at 25 °C.

Keywords. Olive leaf extract, Storage, Arabic bread, Shelf life, Phenol.

1. Introduction

Depending on food laws, the cost and availability of ingredients, public acceptance, and societal trends, bread can have its shelf life extended by adding a single ingredient, changing the method, or combining several different alterations [1]. An easy method of fortifying bread and other items whose processing involves the creation of dough is to replace water with an antioxidant aqueous extract. Numerous plant extracts that may find application in the food sector have been documented [2].The olive is the fruit of an evergreen olive tree that grows in the Mediterranean region's moderate climate. It is one of the most abundant fruit plants in these countries, covering eight million hectares and accounting for 98% of global agricultural production [3].

According to [4], olive leaves are a rich source of phenolic compounds, which are recognized for their healthful and antioxidant qualities, due to their technological and health benefits, olive leaf extracts have been suggested as natural food additives in food formulations with the goal of creating functional foods or extending the shelf life of existing products [5]. Olive leaf extracts are used because of their well-known antioxidant and antibacterial properties to prolong food storage. Thus, this study's goals were to assess the effects of using two concentrations of olive leaf extract (4 and 8%) on Arabic bread's shelf life.

2. Materials

December 2023 saw the gathered of fresh green olive leaves from the farms in Basrah, Iraq.