

Study the Indicators of germination and growth of two varieties of papaya

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Abstract

The study was conducted in the Seyhan Agricultural Reserve in the city of Siba in Basra Governorate during the period (2019-2021), for the purpose of knowing the extent of the success of the cultivation of *Carica papaya* L. and identifying the indicators of germination and growth of two varieties of local and Red lady papaya. Papaya seeds were grown under standard germination conditions.

The results of the study showed the superiority of the Red Lady cultivar in the percentage of germination, seed germination speed and stem diameter, while the local cultivar was superior in seedling height.

Key words: Papaya, Red lady, seed germination, variety

I. INTRODUCTION

Papaya (*Carica papaya* L.), commonly known as Papaya, is the only species in the *Carica* genus of the Caricaceae family (Martelleto *et al.*, 2008). The papaya originated in the Caribbean coast of Central America and is now cultivated throughout the tropical and subtropical regions of the world (Yogiraj *et al.*, 2014).

Papaya occupies 15.36% of the total production of tropical fruits in the world. The global production of papaya in 2017 amounted to about 130,16281 tons. India was the largest producer of papaya (5.94 million tons) followed by Brazil in second place with an annual production of 1057,101 tons. Thus, India and Brazil together account for more than half of the production World Papaya (FAO, 2022).

Papaya has gained great importance due to its high palatability, ability to bear fruit throughout the year, early fruiting, and high yield. Papaya has high nutritional and medicinal value and diverse uses (Azad *et al.*, 2012; Parkash *et al.*, 2015). Papaya fruits are high in polysaccharides. An increasing number of