



Short Communication

Viviparous Seed Germination in *Carica papaya* Linn.

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Abstract

The main aim of this study to presents the abnormal behavior of seed germination of *Carica papaya*. During this study, the ripe fruits were cut into two half and then it was observed that a few seeds of *Carica papaya* were showing germination within the fruit in mother plant. Such a type of seed germination is known as Vivipary.

Keywords: Vivipary, seed, germination, *Carica papaya*.

Introduction

Carica papaya Linn. belongs to Caricaceae family of Angiosperms. Papaya is locally known as Papita. It grows about 5-7 meters in height. The papaya plant is small, slightly branched with multi-dissected palmate leaves. The ripen fruits are yellowish and orange in colour while unripe fruits are green in colour. Unripe fruits contain high quantity of white latex. It is cultivated almost in all over the world. The fruits are very delicious and digestive. Papaya is very important plant. All parts of plant are very useful in herbal medicines. The ripen fruits of papaya used in dyspepsia^{1,2}.

The informations and photographs regarding the abnormal seed germination of papaya were collected from Chhatarpur city. It is

a head quarter of Chhatarpur district of Madhya Pradesh. Chhatarpur district is famous for Khajuraho temples. Khajuraho is famous in all over the world. Geographically, It is located between 24⁰06'-25⁰ 20' North latitudes and 79⁰ 59'-80⁰ 26' East longitude.

Materials and methods

The fruits of *Carica Papaya* have been used by the people as food material. One day, ripen fruits were collected from our kitchen garden. Fruits were cut into two half, in which several normal seeds were found in papaya fruits. Wherein a few seeds of *Carica papaya* were showing seed germination within the fruit as depicted in Figure-1.

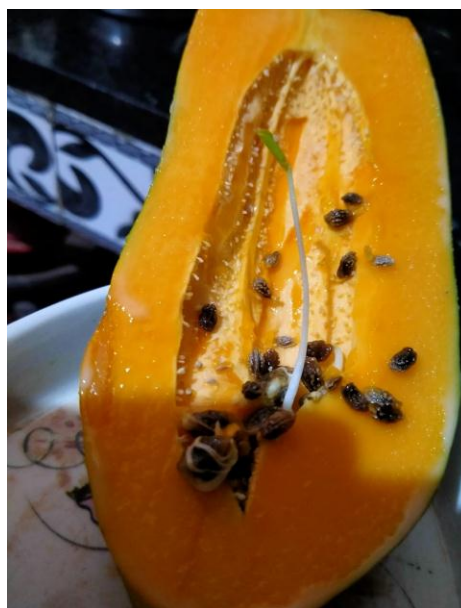
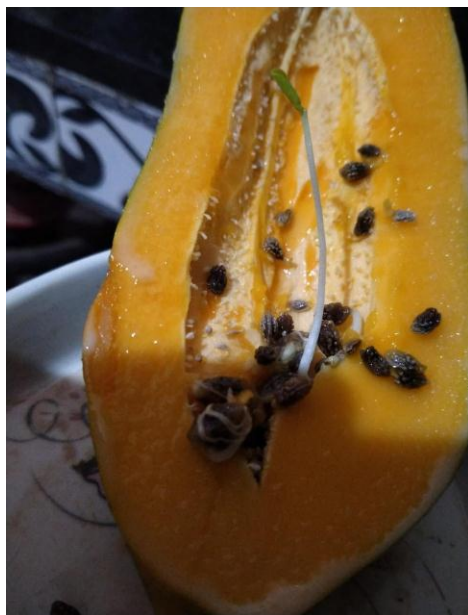


Figure-1: Showing viviparous seed germination in *Carica papaya*.

Results and Discussion

During the course of this study, several seeds were found within the fruits of *Carica papaya*. Of these only one seed was showing germination within the papaya fruit and gave rise normal healthy seedling. In which one radicle and plumule was emerging out from the seed as depicted in photographs (Figure-1). Such type of germination is recorded as the phenomenon of viviparous seed germination. The viviparous germination is a characteristics feature of halophytes which are found in saline and swampy soil. It is very rare phenomenon in papaya plant. The occurrence of vivipary is due to the accumulation of heavy moisture contains inside the fruit of *Carica papaya*. The similar reports on the phenomenon of viviparous seed germination have been reported in many plant species³⁻¹¹.

Conclusion

In the light of above facts it can be concluded that the germination of seeds within the fruits of papaya plant is known as viviparous seed germination. Normally, viviparous germination is found in halophytes. It is rare in papaya plant. It seems that heavy moisture condition within the fruits of *Carica papaya* might be induces vivipary.

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