

CHAPTER 1

INTRODUCTION

1.1.BACKGROUND OF STUDY

The edible fruit of several species of trees in the genus *Diospyros* is known as the persimmon (/prsmn/). The Oriental persimmon (*Diospyros kaki*), which belongs to the Ebenaceae family and is the most frequently cultivated of them, is also one among the species planted for ebony wood. China produced 75% of the persimmons consumed worldwide in 2019.

Persimmons, like the tomato, are not typically thought of as berries, although morphologically, the fruit is a berry. The persimmon tree species *Diospyros kaki* is the one that is most frequently cultivated. Typically, the round-topped tree has a height range of 4.5 to 18 meters (15 to 60 feet). It typically stands straight but occasionally can appear crooked or willowy. The oblong-shaped leaves are 7–15 centimetres (3-6 inches) long and have brown-hairy petioles that are 2 centimetres (3/4 in) long. They have a leathery, glossy exterior and a brown, silky interior. The deciduous leaves are bluish-green in hue. They change to yellow, orange, or crimson in the autumn.

Persimmon trees typically produce male and female blossoms on separate trees because they are dioecious. Some trees that have both male and female flowers can occasionally create a perfect flower, which has both the male and female reproductive organs in one blossom. Clusters of three-headed, pink male blossoms are seen. They have a corolla, a 4-parted calyx, and two rows of 24 stamens in each row. Single, creamy-white blooms are present on female flowers. A large calyx, a four-parted yellow corolla, eight undeveloped stamens, and an ovary with a spherical shape that houses the style and stigma are all features of these flowers. "Perfect" flowers are a cross between the two.

Persimmon trees produce fruit that matures in the late fall and hangs on the tree until winter. The ripe fruit of the cultivated strains vary in colour from shining light yellow-orange to dark red-orange, depending on the species and variety. Similar to other varieties, they can be spherical, acorn- or pumpkin-

shaped, and their diameters range from 1.5 to 9 cm (12 to 3+12 in). Before it reaches full maturity, the golden, orange, or dark-brown flesh is astringent. The calyx usually remains attached to the fruit after harvest, but after the fruit is fully grown, it is easy to separate. When ripe enough the fruit has a sweet flavour and contains a lot of sugar, mainly in the form of glucose and fructose.

The reason I use persimmon is because not many people like the taste and that so much health benefit got wasted in such a fruit. Even so, some people may use persimmon to make chips out of persimmon but many of them usually made in a rural village. Persimmon is rich in vitamin A which plays an important role in eye health. Apart from that, there are also zeaxanthin, lutein and lycopene which both function for eye health and Persimmon fruit has the ability to lower blood cholesterol levels.

1.2. THE OBJECTIVES OF THE STUDY

People rarely consume persimmons without being aware of its numerous health advantages; for this reason, I produced persimmon mousse to let people know that persimmons can be transformed into delectable and opulent dishes.