CHAPTER 1

HISTORY AND ORIGIN

J. S. SANDHU AND SARVJEET SINGH

Department of Plant Breeding, Genetics and Biotechnology, Punjab Agricultural University,
Ludhiana, Punjab, India
E-mail: js_sandhuin@yahoo.com

Abstract: Lentil (Lens culinaris Medikus) is the oldest pulse crop with remains found alongside human habitation up to 13,000 years BC. Its domestication is equally old and was probably one of the earliest crops domesticated in the Old World. It is mainly grown in India, Bangladesh, Pakistan, Egypt, Greece, Italy, countries in the Mediterranean region and North America. It is also being cultivated in the Atlantic coast of Spain and Morocco. The crop has a high significance in cereal-based systems because of its nitrogen fixing ability, its high protein seeds for human diet and its straw for animal feed. It is widely used in a range of dishes and reputed to have many uses in traditional medicine. There are a range of wild lentils but L. orientalis is believed to be the progenitor of the cultivated lentil.

1. INTRODUCTION

Lentil, the plant varies from 6 to 18 inches in height, and has many long ascending branches. The leaves are alternate, with six pairs of oblong-linear, obtuse, mucronate leaflets. The flowers, two to four in number, are of a pale blue colour, and are borne in the axils of the leaves, on a slender footstalk nearly equaling the leaves in length. The period are about 1.5 cm long, broadly oblong, slightly inflated, and contain two seeds, which are of the shape of a doubly convex lens, and about 0.5 cm in diameter.

There are several cultivated varieties of the plant, differing in size, hairiness and colour of the leaves, flowers and seeds (Figure 1). The last may be more or less compressed in shape, and in colour may vary from yellow or grey to dark brown; they are also sometimes mottled or speckled. In English commerce two kinds of lentils are principally met with, French and Egyptian. The former are usually sold entire, and are of an ash-grey colour externally and of a yellow tint within; the latter are usually sold like split peas, without the seed coat, and
consist of the reddish-yellow cotyledons, which are smaller and rounder than those of the French lentil; the seed coat when present is of a dark brown colour. (www.1911encyclopedia.org, 2006)

Popular in parts of Europe and a staple throughout much of the Middle East and India, this tiny, lens-shaped pulse has long been used as a meat substitute. There are three main varieties of lentils, the French or European lentil, sold with the seed coat on, has a grayish-brown exterior and a creamy yellow interior. The reddish orange Egyptian or red lentil is smaller, rounder and sans seed coat and yellow lentil. None of these varieties are used fresh but are dried as soon as they’re ripe. The regular brown lentils are commonly found in supermarkets whereas the red and yellow lentils, though available in some supermarkets, must usually be purchased in Middle Eastern or East Indian markets. Lentils should be stored airtight at room temperature and will keep up to a year. They can be used as a side dish (puréed, whole and combined with vegetables), in salads, soups and stews. One of the most notable showcases for the lentil is the spicy Indian dhal. Lentils have a fair amount of calcium and vitamins A and B, and are a good source of iron and phosphorus.