The Hollow Men, T. S. Eliot (1925).

INTRODUCTION

When the first Spanish conquistadors arrived in the New World, the natives gave them a sweet, red fruit to eat, which they consumed with enthusiasm. The Spanish visitors were soon shocked to discover their urine turning blood red! They first believed they had been poisoned and were bleeding internally but were soon relieved to learn it was simply coloring from the juice of this tasty fruit. The fruit they ate was called “tuna,” and it was the pear-shaped fruit of the prickly pear cactus (Opuntia spp.) (Gerard 1633). The prickly pear cacti have a unique history as plants both beloved and reviled. These natives of the Western Hemisphere entice with their high water content and tasty fruit in arid environments but repel with their forbidding and painful coat of spines. Prickly pears have been a valuable source of food and forage in dry environments, the foundation of an economic empire in dyestuffs, the agricultural scourge of a continent, and the symbol of kings and nations. They are beloved of gardeners, praised and despised by ranchers and farmers, and a source of visual delight and sharp physical pain to those who stumble upon them on the trail. Prickly pears clearly have one of the most colorful tales in the history of weeds.

ETYMOLOGY

The prickly pears are members of the Cactaceae (cactus) family. The Cactaceae includes about 97 genera and 1,600 species of mostly perennial succulent herbs to small trees usually growing in warm and dry environments. The Cactaceae was originally named by the French botanist Antoine Laurent de Jussieu in Genera Plantarum in 1789. Cactus species are popular with horticulturalists and gardeners for their unusual forms and showy flowers. The roughly 200 species in the genus Opuntia consist of mostly shrubby to low-growing clump-forming plants with cylindrical or flattened jointed stem segments called cladodes or pads, covered with small spiny glochids that often have larger spines (Mabberley 1997; Wallace and Gibson 2002; Zomlefer 1994). The taxonomy of the genus Opuntia has been debated and changed many times since Linnaeus. Hybridization and polyploidy are common, and a high degree of phenotypic plasticity has made it difficult to define the boundaries of species within the genus (Benson 1982; Wallace and Gibson 2002).

Cactaceae and the common name cactus come from the Greek “kaktos” meaning a “prickly plant.” It is believed to have originated from Theocritus (310 to 250 BC), who used kaktos for Cardoon thistle (Cynara cardunculus L.), a prickly thistle that occurred in the Old World. Opuntia was an old Latin name used by Pliny (AD 23 to 79) probably referring to the Greek town “Opus,” where a succulent cactus-like plant was believed to grow. Others believe Opuntia is from the Pappago Indian name “opun.” Linnaeus used the name Cactus opuntia to describe the prickly pear cactus in his Species Plantarum in 1753 (Bailey 1949; Benson 1982; Donkin 1977; Gledhill 1989; Quattrocchi 2000; Raven 2000).

The cacti were originally brought to Europe from tropical America by the first Spanish explorers in the early 16th century. One of the first to be brought back was the “Indian fig” or “cactus pear” [Opuntia ficus-indica (L.) Mill.], a plant now cultivated in many dry areas of the world as a source of livestock fodder and human food. The original name “Ficus Indica” meant “fig of the Indies” and referred to the common use of the fruit as food by the Native Americans of the West Indies, where the Spaniards were first introduced to the plant. The first