

Vitaliano Donati (1717 – 1762)

Vitaliano Donati was born in 1717 in the north Italian city of Padua, then under Venetian rule. Of a noble family and keenly interested in science, he studied medicine, natural history, botany and mathematics in his hometown. Founded in 1222 as a school of law, the University of Padua was renowned for its research, and the botanical garden established by the university in 1545 was one of the oldest gardens of its kind in the world. Donati soon focused on natural history, preferring field research to laboratory and library-based studies, and travelled in northern Italy and the Istrian coast, observing the flora and fauna, geological features and ancient monuments.

After taking his medical degree in 1739 he helped teach experimental physics in Padua, and in 1743 when Professor Poleni was consulted about deterioration of the dome of St Peter, Donati accompanied him to Rome. Appointed by Pope Benedict XIV to collect specimens for a museum of natural history at La Sapienze University, Donati set off for Naples and Sicily, but the project was abandoned in May 1743 when plague decimated Messina. He then turned his attention to the east coast of the Adriatic and systematically studied the physical geography, marine biology and alpine and forest flora and fauna of Dalmatia and the principal islands. His report was published in 1750 as *Della Storia Naturale Marina dell'Adriatico*, and later translated into many European languages. It included his friend Sesler's description of a European alpine plant in the primrose family, named *Vitaliana perennis* in his honour.

In 1750 Carlo Emmanuel III of Savoy appointed him professor of botany and natural history at the University of Turin. As well as tutoring, Donati made further scientific excursions in Savoy and the Riviera. He is well known for his scientific and commercial mission to Egypt and the Middle East 1759–1762, collecting artefacts for the museum and specimens for the botanic garden, and observing the processes of mineral extraction, agricultural cultivation and livestock breeding. Back in Cairo in December 1760, he left immediately for Mount Sinai to see the Coptic monasteries; his was the first report of the 1600- year-old bible Sinaiticus, named after the Monastery of St Catherine where it was preserved for many centuries. On 13 February 1762 he left the Persian Gulf in a Turkish ship bound for the Malabar Coast, but became ill during the voyage and died on 26 February 1762. He was buried in Mangalore, India.

A foreign member of the Royal Academy of Sciences in Stockholm from 1757, and a fellow of the Royal Society, Vitaliano Donati was further honoured in 1776, fourteen years after his untimely death, when Johann Reinhold Forster and his son George created a new genus for a plant they named *Donatia fascicularis*, from Tierra del Fuego. The other member of the genus, *Donatia novae-zelandiae*, is found in Tasmania and the southern mountains of New Zealand.

Donatia novae-zelandiae

Donatia (in the family Styliaceae) contains just two species. *Donatia novae-zelandiae* ('of New Zealand') forms dense, hard, dark-green cushions up to a metre or more across. Small, thick, glossy, pointed leaves completely enclose the erect stems, while fleshy white roots emerge from among the persistent dead leaves below the surface of the cushion. In mid-summer round buds push up among the rigid leaves, opening to a multitude of milk-white flowers, the petals arranged with perfect symmetry encircling the paired stamens and styles. Mostly subalpine to low alpine, in North, South and Stewart Islands from the Tararua Ranges southwards, in cushion bogs and seepage channels, it may also be found at sea level in the far south.

