

plex fully; although it is difficult to select and describe individual characteristics, the following stand out: the diminutive stature; the small, disc shaped root system; the reddish stems with few to many erect or spreading branches; the caducous, gibbous leaves, opposite below and alternate above; the bracts which persist through the flowering stage; the small, pentamerous, sessile or subsessile flowers; the fleshy hypanthium; the minute, triangular calyx teeth; the persistent, slightly sympetalous, yellowish corolla with lanceolate or ovate-lanceolate lobes; the five to ten epipetalous, yellow-anthered stamens; and the distinct, clavate carpels.

In geographic distribution and in ecological requirements, as well as in morphological features, the genus *Sedella* forms a distinguishable unit. The four species are all endemic to the foothills and adjacent plains of central California, and their very similar and restricted habitats are not shared by other Californian genera of the Crassulaceae.

Department of Botany,
University of California, Berkeley,
October 16, 1938.

PRISCILLA AVERY

Priscilla Avery was born in Redlands, California, on June 12, 1899. One of five children, she was brought up in a cultural and intellectual atmosphere; her father, Lewis B. Avery, is a well known educator, a sister, a talented musician, and a brother, a noted inventor. Always distinguished in her academic work, Miss Avery held a Levi Strauss scholarship as an undergraduate at the University of California; she was elected to Phi Beta Kappa in her junior year, and at her graduation in 1926 she received highest honors in the College of Agriculture. She was a member of Sigma Xi and Phi Sigma science honor societies, also of the American Association for the Advancement of Science and the California Botanical Society.

As a graduate student, she carried on research in the field of genetics at the University of California, receiving the degree of Doctor of Philosophy in May, 1930. She was a teaching fellow in zoology and an assistant in the Division of Genetics during the academic year, 1927-1928. From 1928 to 1934 she held the position of preparator in the Department of Botany, and from 1934 until her death on December 29, 1939, she was cytologist for the University of California Botanical Garden.

While associated with the Division of Genetics of the College of Agriculture, her work was concerned with interspecific hybrids in *Crepis* with special reference to chromosome morphology. Later, after taking up her position with the Department of Botany and finally with the Botanical Garden she worked almost

exclusively with *Nicotiana*. As a microtechnician in her own field she was unsurpassed. She published significant contributions on chromosome morphology and behavior in inheritance in *Nicotiana tabacum*. Her last paper, published with Dr. Thomas Harper Goodspeed, was a comprehensive survey of the trisomic types



PRISCILLA AVERY

expected and discovered in *Nicotiana sylvestris*. It represents the results of an immense amount of work done on hybrids and crosses through a period of years. Dr. Avery's experience and knowledge of the subject enabled her to coordinate all of these data. In no other species except *Datura stramonium* has a complete set of primary trisomic types been established.

During the last twelve years of her life while she was concerned especially with work on *Nicotiana*, she gained a comprehensive knowledge of specific and cytogenetic relationships in the genus and was ever ready with helpful suggestions for her associates. She came to know many scientists in related fields and made a deep impression of scientific honesty and analytical keenness on all with whom she came in contact.

Her life-long struggle for health is an inspiring story of a successful attempt to overcome what would seem to be insurmountable difficulties. Her strict adherence to a schedule is evidence of the perseverance, spirit of determination and tremendous energy which enabled her to overcome the odds against her and to lead a normal life. In the death of Dr. Avery, plant scientists, especially those in cytology and genetics, lost one of their most able workers and sincere friends. She died after a year's illness which she faced courageously. Her many friends will always remember her, not only as a scientist, but as a generous and sympathetic person,—one whose first thought was for the comfort and happiness of others.—MARION CAVE.

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PINUS TORREYANA IN CULTIVATION

ALBERT WILSON

Throughout the garden districts of San Francisco peninsula are grown plants of unusual quality, many of which are exotics introduced into California from various countries of the world. However, among our native plants there are a few which, because of their limited natural distribution, have been claimed as garden subjects. Among the latter is *Pinus Torreyana*, the Torrey pine.

Pinus Torreyana is native only on Santa Rosa Island and on the southern California coast twenty-two miles north of San Diego. In these two areas the trees are small with widely spreading branches forming symmetrical crowns, but under cultivation they adopt a habit distinctly foreign to that of their native state. One of the finest cultivated specimens in the state of California is a tree fifty years old. It is growing in excellent garden soil in an open area favored by sun all day and is situated about one hundred feet from a characteristic Californian creek, namely one which has running water but a few months of the year. The tree is seventy-five feet tall and the total spread of the branch system is about one hundred five feet. The main branches are displayed in a tier-like arrangement with the lowest tier composed of four major branches. The largest of these is thirty-three inches in



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