

Native Plant Highlight

Christmas Fern, *Polystichum acrostichoides* (Michx.) Schott

While the Christmas holiday is still fresh in our minds, let's discuss the Christmas fern, (*Polystichum acrostichoides*). The common name likely reflects the fact that the species is evergreen and still appears fresh throughout the winter, which includes the time of Christmas.

Christmas fern is a woodland species preferring moist, rich organic soils. The species is most common in the Piedmont province of Delaware, becoming rare further south as the soils become more acid and sandy. On the Coastal Plain in Delaware, Christmas fern is usually found in a habitat called a "rich wood." Here the soils are more organic and not as acidic as most Coastal Plain soils, as a result Christmas fern and other species typical of the Piedmont often become established.

Within the genus *Polystichum*, there are 180 species worldwide, with 15 occurring in North America. In Delaware, we have just the one species, *P. acrostichoides*. The overall distribution of *Polystichum acrostichoides* in North America is from Nova Scotia, south to Florida, west to Texas, and north to Minnesota.

The leaf morphology of Christmas fern can be variable and many forms have been recognized. In addition, hybrids are often encountered when two different species are present in the same habitat. The fronds, or leaves are evergreen and leathery in texture, and are lanceolate in shape. The pinnae, or leaflets have a basal lobe on the upper side, and the margins of the pinnae are sharply serrate. The fronds of Christmas fern are dimorphic, meaning the fronds occur in two forms, as a sterile frond and a fertile frond. The fertile frond contains fuzzy, chestnut brown sori (structures that contain spore producing organs) that appear on the back of the pinnae.

Christmas fern is an attractive plant that is easy to cultivate in a woodland garden, or in a shady corner of your home.

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