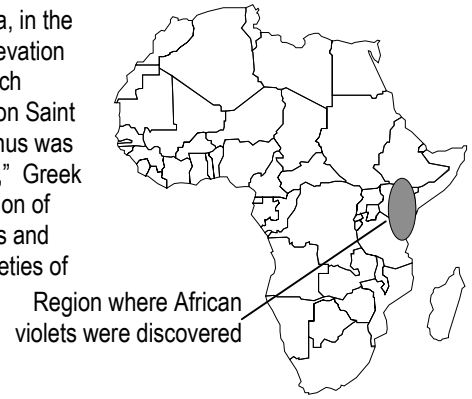
❀❀ History & Botany of African Violets ❀❀

Cyndi Fink, M.S., Plant Ecology
Pittsburgh African Violet & Gesneriad Society

African violets were discovered in 1892 growing in the Usumbara mountains of Tanzania, in the eastern part of Africa. The mountainous region where the plants were found, with an elevation of approximately 3,000 feet, is considered a cloud forest, a cool, lush, humid habitat which produces a wide diversity of plant species. The discovery was made by Baron Walter von Saint Paul-Illaire, whose father was a patron of a botanical garden in Germany. The plant genus was named "Saintpaulia," for its discoverer, and the particular species was named "ionantha," Greek for a violet-like flower, hence the botanical name *Saintpaulia ionantha*. Further exploration of these mountainous regions of eastern Africa yielded approximately 20 additional species and varieties. From a handful of these species, hybridizers have created thousands of varieties of the common houseplant known as the African violet.

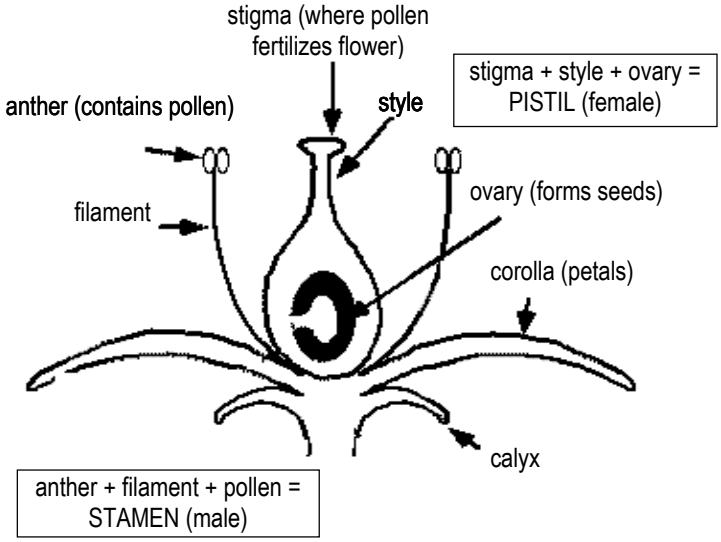


The Gesneriad family

African violets and their relatives are members of the plant family Gesneriaceae (JEZ-nare-i-ace-e-ay), or Gesneriads (JEZ-nare-e-ads), which are plants that are mostly herbaceous (or having no woody stems) flowering plants closely related to the common garden perennial foxglove. There are approximately 2000 species of Gesneriads in the world, most being found in Africa and South America, although the African violet species are only found in the small mountainous rain-forest regions of eastern Kenya and Tanzania. The Gesneriad family was named after Konrad Gesner, a Swiss botanist born in 1516 who studied plants as sources of medicine. Although the Gesneriad family was not described until 1693, long after Gesner's death, a French botanist suggested this family be named to honor Gesner's contributions to the field of botany.

Gesneriad flower structure

Although different species of Gesneriads appear distinctive from one another, botanical classification places all these species in the same family based only on flower structure. All Gesneriads, including African violets, produce perfect flowers, meaning both male (stamen) and female parts (pistil) are found in each flower. The flowers are also zygomorphic, indicating only one line of symmetry divides the flower into equal sections, or mirror images. The ovary of all Gesneriads sits above the calyx (green base of flower) and corolla (colored petals). When pollinated, the ovary forms one seed pod, or capsule, containing many seeds. Other flower similarities which separate Gesneriads from other plant families are less obvious and must be examined microscopically. While African violets form fibrous roots, other Gesneriads can form either rhizomes or tubers. Some members of the family grow in a radial arrangement, like African violets, while some grow as trailing stems or vines. Most Gesneriads have fuzzy hairs



growing from the leaf surface, although some species have leaf surfaces that are shiny and succulent. Flower color in the family ranges from all imaginable: blues, pinks, oranges, yellows, violets, reds, and whites; flower shape is equally varied.

Types of hybridized African violets

African violets come in many different types, all originating from the original species found in Africa. Most violets, called standards, have been hybridized to grow in a round rosette, which can range from 8-16" across. Hybridizers also have introduced miniature and semi-miniature varieties, which grow up to 6" and between 6-8", respectively. These smaller varieties are ideal for those who want a large variety of blooms in a limited space. Leaf variations are also common traits of hybridized plants, including variegated leaves, differing leaf shapes, and red-backed foliage. Variegation is typically white, occurring throughout the leaf, but some hybridizers have developed pinkish variegation and variegation that only occurs on the margin of the leaf. Another unique plant type is trailing African violets, where leaves grow along a long main stem and produce many rosettes, forming a large mounded plant or attractive trailing vine. Flower color and type is a common variable. In addition to the standard blues, violets, reds, whites, greens, and combinations thereof, fantasy blossoms are colored with a contrasting speckle pattern, while chimeras have striped blossoms. Although many attempts have been made, hybridizers have yet to produce a true yellow colored violet.

Prepared by Cyndi Fink, M. S., Plant Ecology
September 2002
S_ionantha@yahoo.com