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# Violets' Design Provides Evidence of Creation

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**by Stephen B. Austin**

Walking along a woodland trail in the spring, one often misses the little violets, unless he or she has a keen eye and especially searches for them. Often they hide among the grasses and other vegetation beneath the trees, shrubs, and taller herbs. Yet, closer examination will yield an exclamation of the wonderful design in the individual flowers.

## Flowers

These plants are perennial herbs, and most species of violets produce two types of flowers: those blooming in the spring and early summer are showy, and ". . . if no seed is produced, the plant develops much smaller flowers in autumn."[1] These later flowers botanists often call cleistogamous flowers. More on this term later.

The showy flowers have five petals, five sepals, and five stamens. Botanists call this a five-merous flower; the petals are not alike, however. The lower petal possesses a spur or deep sac at its base. The two lower stamens are located at the base with nectar-bearing appendages which project into the spur or sac of the petal. Sanders described the violet flower in a most interesting manner: "The blossom . . . five petals: two upper, two lateral, and one bottom. The two pairs act as flags to attract pollinating insects while the bottom petals serve as a landing strip."[2]

## Seeds

Once pollinated, each flower commonly produces an abundance of seeds in what are called seedpods. These seed pods slowly dry until they eventually burst, catapulting the seeds up to four feet away. The petals have highlighted veins which direct the pollinating insect to the location of the pollen. This is a fascinating design feature that is seen in numerous plant species. Evolutionists contend that such designs have evolved separately in unrelated plant groups through what is theorized as "convergent evolution." However, there is no evidence for that in the fossil record. Instead, we see a stasis — plants remaining basically the same, except for minor adaptations and variations within the "Genesis kind."[3]

Violets often have a secondary method of producing seeds, especially if conditions prevent seeds from forming from the showy flowers, or if the seeds are carried away to other locations, where they may or may not germinate. These plants thus produce a group of smaller flowers (cleistogamous) which remain closed and yet produce seeds. The term "cleistogamous" comes from the Greek word *kleistos*, which means closed. These self-pollinated flowers are not as suitable as the regular ones, because the seeds do not have the genetic variability evidenced in cross-pollinated flowers; however, they do insure that the species remains abundant in that area from year to year. Even so,

> Not all violets produce these non-blooming flowers. Some summer violets, such as *Viola tricolor*, bear showy blossoms, can easily attract insects, and do not appear to need backup cleistogamous flowers.[4]

Violets can also spread in a third manner — via rhizomes (underground stems) or runners (above-ground stems) — much like the common strawberry, many grasses, and numerous other plants.

So our Creator has provided three methods of propagating this group of plants: insect pollination, self-pollination, and reproduction via rhizomes or runners. The rhizome/runner method works quite well, as Imes reported:

> Plants that spread by runners or rhizomes can play the same game as grasses, snaking their way through the maze of grass blades or roots until they find a chink and putting down their own roots. Wild strawberries and violets employ this method successfully in lawns.[5]

## Colors

Violets appear in various colors: purple, pink, violet, white, or even multi-colored, as in the Johnny-jump-up, *Viola tricolor* (see cover photo)**.** Here in Colorado, where I live, one can find violets that are totally blue, totally yellow, or totally white, growing along trails in the mountains. They are indeed a special delight!

Violet flowers have distinct lines on the petals, as mentioned earlier. These are called "nectar guides" or "pencil lines." These lines guide pollinators to the source of nectar and to a position that will allow the pollinating insect to not only retrieve the pollen it seeks, but also to transfer pollen from one flower to another as that insect travels from one plant to another. Think of these lines as being comparable to runway lights at an airport.

Also note that the lower petal in the violet flower contains a spur. As previously discussed, this spur contains the two lower anthers (of the five). Sanders added:

> Some species have hairs near the nectar opening, giving the insect something to grab onto while pushing its head inside. Functioning like our eyelashes, these 'beards' also prevent rain or dew from getting in and diluting the nectar [our Creator God has thought of everything!]. When visiting most flowers, a bee must touch the anther to pick up the pollen on it. Not so in violets. As the insect wiggles in for a drink, it jiggles loose grains from the partly hidden anthers overhead. The pollen drops and dusts the bee's back.[6]

Our Creator God, the Lord Jesus Christ, has even designed these beautiful plants with edible and medicinal qualities.

## Edible uses

One Colorado author, H. D. Harrington, wrote:

> Apparently all species of violets are edible, even the garden varieties. We tried about ten native species and found them all good, with no objectionable flavor or harsh bitterness in any of them. Jaeger[7] . . . mentioned that violets are cultivated for food in the gardens in Europe and we know of a few people in this area who raise them for salads. The young leaves and flower buds are used raw. A favorite mixture of ours consists of head lettuce, halved cherry tomatoes, peeled fresh carrots, shredded violet leaves and other native salad plants as available. A few drops of vinegar can be used as a dressing. The leaves and buds are best in the spring, but even in late summer young leaves can be selected that will make an acceptable salad. We have found raw violet leaves tender and good but perhaps just a bit flat tasting when eaten alone.[8]

Harrington also suggested, ". . . violet leaves make a good substitute for tea. In fact, many of the old timers in this area fondly recall that they drank delicious violet-leaf tea when they were children. We have tried tea made from several species

including *Viola canadensis, V. Rugulosa. V. Nuttallii, V. Nephrophylla* and *V. papilionaceae.* Long boiling does not make the tea bitter, and a little added sugar improves the taste. Violet-leaf tea is for sale in a few food stores of this area."[9]

Kershaw, MacKinnon and Pojar echoed Harrington in stating:

> All violets are edible, even garden varieties such as Johnny-jump-ups and pansies. The leaves and flowers can be eaten raw in salads, used as potherbs or thickeners, or made into tea. Violets are high in vitamins A and C. The flowers can be used as a garnish (fresh or candied) or as a flavoring and colouring in vinegar, jelly and syrup.[10]

These three authors continued with a warning, saying, ". . . the rhizomes, fruits and seeds are poisonous, causing severe stomach and intestinal upset, as well as nervousness and respiratory and circulatory depression."[11] I believe this is due to the Curse which came upon mankind and nature in general as a result of Adam's fall; so caution and awareness are noted.

Kirk listed violets as being edible. He discussed *Viola pedunculata* and wrote, "The leaves and stems are good when eaten as greens."[12]

Seebeck discussed violets as edible plants. He writes that the best tasting parts are the leaves and flowers, saying they have a mild flavor. He lists their uses: "Raw in salads, omelets, tacos, sandwiches, all-flower salads, and marinades."[13] He added that it can be cooked ". . . in rice dishes, egg rolls, quiche, and as a soup thickener."[14] He further lists that it can be steeped for tea.

But then he adds a **CAUTION:** "The rounded leaf violet species may be confused with heart-leaf arnica (poisonous) before flowering. Violet is not recommended for the foraging novice until flowers appear."[15] So once again we encounter a part of the Curse because of Adam's rebellion.

Sanders wrote: "Violet tastes tender and quite sweet. The flowers of *V[iola] tricolor* taste almost like grape-flavoured bubble gum." He added: "Both the leaves and flowers are a good addition to any salad. . . Violet tea is great. Violets are high in Vitamin C and beta-carotene (two fresh violet leaves fill the RDA for vitamin C.)."[16]

## Medicinal uses

And now we will discuss some reported medicinal uses. Caution, however, must be exercised. Coon wrote:

> Attention was originally focused on the violet as a cancer cure because of several reported cases. Most notable of these was the case of General Catharine Booth of the Salvation Army, who, suffering from advanced cancer, is said to have found alleviation of pain with violet foliage.[17]

He continued: "Going back to the Romans, Pliny recommended that a garland of violets be placed on the head to cure headache or hangover, while somewhat later Dioscorides tells of its value for stomach ailments and other complaints."[18] Coon mentioned many other medicinal uses of violets in treating boils, impetigo, ulcers, and other eruptions, and as being helpful in such things as psoriasis, cutaneous eruptions, and skin troubles.[19]

Sanders also discussed the medicinal use of violets in his treatise:

> Violets were extensively used as medicines from at least the 16th century on, and many herbals highly recommended them for such problems as insomnia, epilepsy, pleurisy, impetigo, ulcers, jaundice, eye inflammations, and rheumatism. Because of their ability to lubricate the linings of the alimentary canal with a soothing coating, they were widely used as a mild laxative and as a cough medicine.[20]

Willard offered some medicinal uses of violets: "*Viola tricolor* is listed as a diuretic, expectorant, alternative, a mild laxative, and a mild sedative. Violets are often used for their blood-purifying qualities. They are even reported to be useful in cases of cancer because they keep the blood so clean that cancer has 'nothing to live on.' "[21] He added,

> "In the form of an infusion the leaves have been used to relieve bronchitis and fevers, to act as a mild laxative (the yellow ones are the most laxative ones). Leaf infusion has been used as a gargle for sore throats and coughing for centuries. Viola extract has been put into some cough syrups, often combined with coltsfoot. Violets are said to have mild hormone regulating capability. In this regard, *Viola adunca* roots and leaves were used by Makah women in Washington state during labour. Violet's diuretic properties have been utilized in rheumatic diseases. These plants have been employed for asthma, heart palpitations, skin eruptions, boils and eczema. Salve and poultice recipes can be found in many herbals.[22]

Donald and Lilian Stokes have had a lot to say about violets. Regarding edible qualities, they wrote ". . . they contain three times as much vitamin C as oranges. The flowers can be collected and made into a jam, jelly, or syrup, and the leaves can be collected when young and fresh and boiled much like spinach for a cooked green. A friend once gave us a jar of violet jelly and we enjoyed it on toast for the several weeks that it lasted."[23]

## Final thoughts

One may ask, if our Creator God provides us with this plant that is so tasty and useful, why are we plagued with warnings and dangers? As mentioned previously, this is because of Adam's disobedience, sin, and revolt against God's instructions, as recorded in Genesis chapter three. We look forward to the removal of the Curse and restoration of all things promised in numerous biblical prophecies (Isaiah 2:4; 65:17-25; Acts 3:21; Revelation 21:1-5).

As you walk along woodland paths in the springtime, watch for these beautifully designed wildflowers. You might even consider growing them in your garden, although they do tend to spread considerably.

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[2] Sanders, J.. 2003. *The Secrets of Wildflowers: A Delightful Feast of Little-Known Facts, Folklore, and History.* Guilford, CT: The Globe Perquot Press, p. 48.

[3] Bergman, J. 2002. The evolution of plants: a major problem for Darwinism. *Technical Journal* 16(2):118–127.

[4] Sanders, p. 49.

[5] Imes, R. 1990. *The Practical Botanist: An Essential Field Guide to Studying, Classifying, and Collecting Plants.* New York City: Simon & Schuster, Inc., p. 58

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[7] The source mentioned is Jaeger, E. 1946. *Wildwood Wisdom*. MacMillan Publishing.

[8] Harrington, H.D. 1967. *Edible Native Plants of the Rocky Mountains*. The University of New Mexico Press, p.152.

[9] Ibid.

[10] Kershaw, p. 176.

[11] Ibid.

[12] Kirk, D. 1975. *Wild Edible Plants of Western North America*. Happy Camp, CA: Naturegraph Publishers, p. 223.

[13] Seebeck, C.B. 1998. *Best-Tasting Wild Plants of Colorado and the Rockies*. Englewood, CO: Westcliffe Publishers, p. 143.

[14] Ibid.

[15] Ibid.

[16] Sanders, p. 51.

[17] Coon, N. 1979. *An American Herbal: Using Plants for Healing*. Emmaus, PA: Rodale Press, p. 208.

[18] Ibid.

[19] Ibid.

[20] Sanders, p. 54.

[21] Willard, T. 1992. *Edible and Medicinal Plants of the Rocky Mountains and Neighboring Territories.* Calgary, Alberta: Wild Rose College of Natural Healing, Ltd., pp. 141–142.

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## Additional resources


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