

VNPS Piedmont Chapter WILDFLOWER of the WEEK

WILDFLOWER #83 answer: EBONY SPLEENWORT (*Asplenium platyneuron*)

Ebony spleenwort is dimorphic—it has two distinct kinds of fronds. The long fertile fronds are semi-evergreen; they stand upright, the better to release spores on the wind. Narrow, tapered at both ends, they bear sori on their backs in herringbone vees. Below them, the stubbier sterile fronds are evergreen; they spread close to the ground, the better to withstand cold. Stems of both kinds are not really ebony, but a deep red-brown. Look for the alternate arrangement of pinnae (leaflets) with auricles (“ears”).

Spleenworts were so named because they were thought to heal the spleen. This genus hybridizes readily, so if you find a weird plant, it might be a hybrid. Ebony spleenwort is the most common spleenwort in the Appalachians, and it is a progenitor of many species there.

A lot of ferns spread by rhizomes, but ebony spleenwort is short-creeping and new ferns don't bud from the roots. It has an unusual adaptation, though: buds can form on the lower stalk, fall off, and develop into new plants. This shortcut augments the more usual way of reproducing.

Fern spores germinate into prothalli, small flat plants with just one set of chromosomes. (You hardly ever notice prothalli.) They make eggs and sperm, which unite to form sporophytes, large plants with two sets of chromosomes. (This is the generation of ferns you see). In ebony spleenwort, each prothallus makes both eggs and sperm, so one spore can make many grandchildren. Both generations can survive conditions from fairly wet to quite dry, from light shade to full sun. You find this fern on old, mortared stone walls, as well as rocks and soil.

WILDFLOWER #84

Clues: In a wetland, look for cigar-shaped flower heads among tall leaves.



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