

## Observational Study at Airport Food Forest

Cultivar: Wild Partridge Pea, *Charmaecrista fasciculata*.

Family: Legume

Location, farm practices, and Soil Types:

11 Early Avenue, Sandston, Virginia

**Management:** Permaculture for 10 years (beyond organic); before that woodlot.

Soil type 87 percent Coxville silt loam. The general characteristic of this soil is that it is poorly draining and has high organic matter (4 percent on unimproved section). The operator has been very aggressive about instituting a program of improving the drainage of this site via cover cropping, mulching, and compost incorporation. The organic matter content in cultivated areas of the farm is 10 percent. The soil PH in uncultivated areas of the farm is 4.3.

### First Year Observation:

**Method:** The investigator used a map to survey the farm and marked each identified population of plants with flags. The area was then drawn on a map with grid paper to more precisely identify where population of plants were growing.

**Plant Characteristic of partridge pea at the Airport Food Forest (AFF): Plant Height:** Up to 3-foot-tall plants have been observed but generally 2.5 ft. The flowers are yellow.

First Plant Identified Date: May 23, 2022

First Flowering Date: July 14, 2022

First Pod Formation: August 22, 2022

First Harvested Pod: September 24, 2022

**Summary:** 52 days to flowering, 91 days to pod formation, 123 days to harvest of pods.

**Growing Conditions:** The plant grows in mostly disturbed sections of the farm. It grows commonly in combination with other native plants on the farm. Probably the most common growing combination on that have been observed in year one of this study is the following: Partridge pea, Carolina geranium (*Geranium carolinianum*), common dandelion (*Taraxacum officinale*), and Himalayan Blackberry.

**Insect Populations Observed:** The most common insects observed have been bees and wasps. I have also seen soon ants in some populations.

**Light Conditions:** Full sun is the most common light condition for almost all the population that were identified in year.

**Moisture:** because of the nature of the soil at AFF, the moist condition for most of the growing season was high. This did not appear to inhibit the growth of partridge peas.

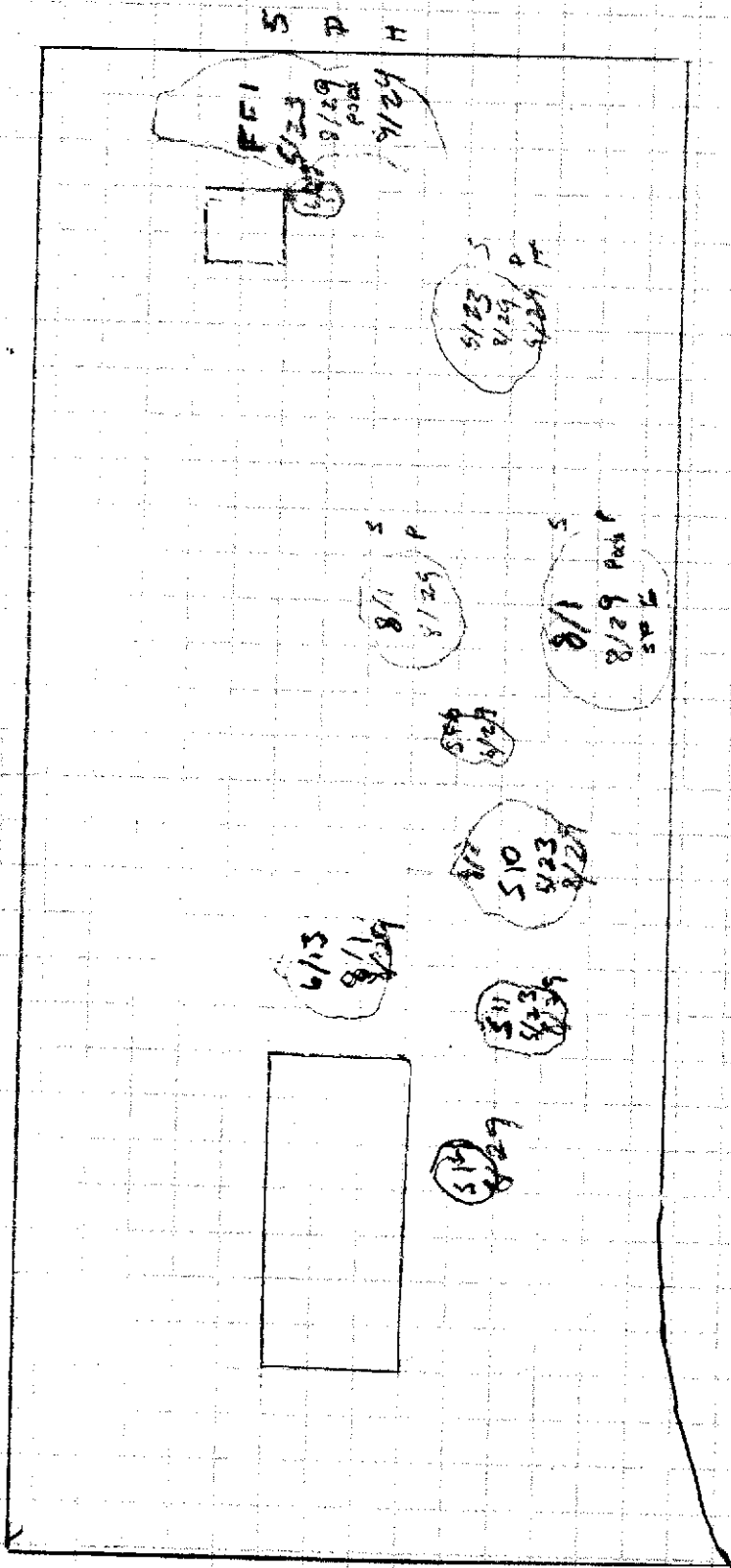
**Soil Temperature:** The average soil temperature for the growing year was 80.67°.

# Summary Partridge Pea Data

Tips

Month	Soil Temp	Light	Moisture	Description
May	75.00	9.00	5.50	
June	79.60	8.20	7.50	
July	88.75	8.00	10.00	
August	88.00	8.00	7.50	
September	72.00	8.00	8.00	
<b>Averages</b>	<b>80.67</b>	<b>8.24</b>	<b>7.70</b>	

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# Airport Food Forest Wild Partridge Pea Map

FF = Food Forest

SF = South Field + (Wed #)

PA = Parkins Area