

Jack-in-the-Pulpit Rust  
[Also on Green Dragon]

*Uromyces ari-triphylli*  
(Schweinitz) Seeler



On Jack-in-the Pulpit (*Arisaema triphyllum*)

OVERALL: Gorman Stream Valley NRA, 4/30/2010, N. Magnusson.

CLOSEUP: Browns Bridge, 5/6/2011, R. Solem

On Green Dragon (*A. dragontium*)

OVERALL: MPENA, 6/4/2016, J. Solem.

CLOSEUP: MPENA, 6/2/2016, B. Ott.

Jack-in-the-Pulpit Rust

*Uromyces ari-triphylli*  
Pucciniaceae

J	F	M	A	M	J	J	A	S	O	N	D
				+	+	+	+				

**ID:** Orange pustules on leaves of Jack-in-the-Pulpit (*Arisaema triphyllum*) and Green Dragon (*A. dragontium*).

**Habitat:** On leaves of the above species.

**Fruiting Body:** Up to 0.5" across? [1.3 cm]

"A fungal pathogen causing damage to the corm, the leaflets, and the spathe. An infected plant is easily identified by the presence of bright yellow, spore-producing, surface lesions. Impacts of this fungus include reduced growth of the plant and potential flower stage regression, reduced vegetative propagation, and inhibited pollination due to deformations in the spathe and its covering hood. In a given population of Jack-in-the-Pulpit, a fourth of the individuals are infected by this fungus. Of the infected female plants, the vast majority are no longer able to produce seeds."\*

"Like Springbeauty and Mayapple, Jack in the pulpit is affected by a fungal pathogen—a rust called *Uromyces ari-triphylli*, which attacks only *A. triphyllum* and its sister species in the Northeast, *A. dracontium*. It can invade the entire plant, causing bright yellow-orange, spore-bearing pustules to appear in the leaves and spathe of the plant. The fungus has a negative effect on the plant, reducing the leaf area and longevity. Young plants that develop vegetatively from cormlets of the affected plant are infected inherently, but their seeds are not and so remain viable even when the parent plant is diseased. Larger (and therefore female) plants are more frequently and adversely affected, with most of them reverting to male status the following year. Once infected the plant carries the fungus for life."\*\*

**Frequency:** Fairly common.

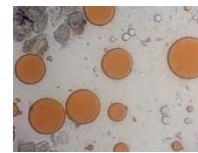
**Locations:** BRNBR, GONRA, GWACP, MPENA, MURHL, OTHER, ROBNC, SLMLP, SYRIV, WATFD, WSTRP, WINTR, ZIRNP.

**Notes:** Mycobank 291825.

**References:** BBF 470, 19.

\* [www-psu-edu.dept.nkbiology.naturetrail.speciespages.jackinpulpit-htm.i0.pdf](http://www-psu-edu.dept.nkbiology.naturetrail.speciespages.jackinpulpit-htm.i0.pdf)

\*\*Carol Gracie, *Spring Wildflowers of the Northeast: A Natural History* (2012) [Jim Brighton, *pers.comm.*]



OIL (from pustules): 400X, MPENA, 6/4/2016, R. Solem