

Table 4. Pawpaw Pollen Germination at Various Temperatures^{1,2}

Year and Pollen Source	Germination Temperature (°C)						
	4.0	10.0	14.3	24.3	29.6	35.0	45.0
2024¹							
Cultivar			54.8 ± 3.5	46.2 ± 3.1	46.6 ± 1.9		
Woodland			57.8 ± 2.6	54.0 ± 3.1	48.4 ± 4.0		
2025²							
Cultivar	0.0 ± 0.0	1.8 ± 2.1	59.6 ± 3.0	62.2 ± 2.6	59.8 ± 2.8	35.3 ± 3.9	0.1 ± 0.1
Woodland	0.0 ± 0.0	5.7 ± 4.8	63.7 ± 1.9	62.5 ± 2.1	61.8 ± 2.4	42.3 ± 3.8	0.0 ± 0.0

¹2024 experiment was conducted on April 22nd using the thermogradient table in the Ornamental Plant Germplasm Center. Pollen was plated with filaments intact approximately 2 hrs after collection. For each source/temperature combination, pollen was brushed onto 3 plates containing Brewbaker and Kwack (1963) agar media and allowed to germinate for 2 hrs before scoring. After germinating, pollen grains were stained (fixed) with lactophenol (cotton) blue. Germination percentages were calculated based on 5 views per agar plate. Values represent the germination percentage mean and standard error for each source/temperature combination.

²2025 experiment was conducted on April 24th using the thermogradient table, a walk-in cold room, incubators and an oven in the USDA/OSU Ornamental Plant Germplasm Center. Pollen was plated with filaments intact approximately 2 hrs after collection. For each source/temperature combination, pollen was brushed onto 3 plates containing Brewbaker and Kwack (1963) agar media and allowed to germinate 2 hrs before scoring. After germinating, pollen grains were stained (fixed) with lactophenol (cotton) blue. Germination percentages were calculated based on 8 views per agar plate. Values represent the germination percentage mean and standard error for each source/temperature combination.