Liliaceae, Alliaceae, Amarylidaceae Taxon Report

For my report I have several genera to report on from the Liliaceae family. I do not have any examples for the Alliaceae or the Amarylidaceae families because I could not find a distribution map for Pennsylvania State or for the country. I have included maps for the genera that have the most samples of the families that I could find distribution maps for.

I will start out with the genus *Clintonia* of the Liliaceae family. The *Clintonia* genus is a rhizomatous herb with 2-5 leaves and an umbel inflorescence with yellow or white petals. This family is usually found in moist woods.

The James C. Parks Herbarium contains 4 specimens from this genus. The four specimens in the herbarium are from Pennsylvania, Oregon, New York, and Maine. More specimens should be collected from other areas around the country to better represent this genus’s distribution.
The genus *Convallaria* is a rhizomatous herb with basal appearing leaves, a racemus inflorescence of white flowers, and is usually about 2 dm tall. These flowers are also native to Europe.

For this genus, the herbarium contains just three samples, all from the midstate of Pennsylvania region. The *Convallaira* genus is more widespread than the examples of the James C. Parks herbarium, with samples having been collected portions of Pennsylvania and from much of the coastal areas of the country. Across the state of Pennsylvania, the examples collected are not in all counties, but this is still a wider distribution then the collection of the herbarium.

The next genus, *Erythronium* is a bulbous herb with leaves that appear basal and a single flower with either yellow or white petals. There are quite a few examples in the herbarium of this genus. The James C. Parks Herbarium contains 20 examples from across Pennsylvania and even has one from
Tennessee. The genus can be found all across the country and the herbarium has a good start on this genus. More examples would be needed from across the country to round out the herbarium better.

The *Maianthemum* genus is a rhizomatous herb that is about 15 cm tall. There are usually 2 to 3 alternate leaves and the inflorescence is a raceme with a peritanth of 2 sepals and 2 white petals.

The James C. Parks Herbarium has 6 examples of the genus *Maianthemum*. The examples were collected from Pennsylvania and also Maine. The herbarium has a good distribution of this genus, but could use more from further west of the country to be better show the distribution of this genus. The herbarium’s examples of the east coast distribution have a good distribution for Pennsylvania and Maine but needs a few more from other states across the country. The distribution of this genus is shown to be across the country and even up to Alaska.
The *Medeola* genus is a white tuberous herb that is usually 1 m tall. The leaves are in 2 whorls around the stem and the inflorescence is either single or paired.

The James C. Parks collection of the genus *Medeola* consists of just 2 examples. Both were collected in Pennsylvania but not in the same county. Distribution has shown this genus across the state and along the east coast. This genus is not found in collections further west than Louisiana. The map below shows the distribution of the herbarium's samples.
The genus *Muscari* is a bulbous herb with basal leaves and a racemus inflorescence. The two species in *The Plants of Pennsylvania* by Rhoades are not native to the US, but instead are native to Europe. The James C. Parks Herbarium has 10 samples of this genus and 3 different species, 2 of which are not covered in *The Plants of Pennsylvania*. The 2 species not covered in *The Plants of Pennsylvania* may also be introduced, though I was unable to find confirmation of this.

The distribution of *Muscari* across the country was mostly along the coast. The Midwest and West of the country did not show any samples being found there. The James C. Parks Herbarium has a good distribution for Pennsylvania.

The genus *Ornithogalum* is a bulbous herb with basal leaves, an racemus inflorescence and a white perianth with a green stripe on the back of each lobe.
The James C. Parks Herbarium has 11 samples from this genus currently in its collection. 10 of these were collected in Lancaster County, Pennsylvania and 1 was collected in York County, Pennsylvania. The genus has been found all across the country, even to the west coast. The herbarium’s collection does not reflect the total distribution of this genus. The map below only shows the state of Pennsylvania because the herbarium’s specimens were taken only from Pennsylvania.

![distribution map](image)

The genus *Polygonatum* is a rhizomatous herb with unbranched stems, alternating leaves, and axillary flowers occurring singly, in a pair, or in an umbel.

The James C. Parks Herbarium contains 7 examples, all from Pennsylvania. Most are from Lancaster County, but there are a couple from Butler and Union Counties as well. This genus can be found across Pennsylvania and the country. The distribution doesn’t seem to reach the
west coast, instead it seems to go as far as Arizona and Montana. The
herbarium’s collection does not extend this far west, as can be seen on the
map below.

The genus *Smilacina* is a rhizomatous herb with unbranched stems,
alternate leaves, and the inflorescence is a raceme or panicle. The perianth is
white and can be 1 to 6 cm long.

The James C. Parks Herbarium has 19 samples in it’s collection of
this genus. It is found all across Pennsylvania, though I was unable to locate
a nation map of it’s distribution across the country. The James C. Parks
Herbarium has some samples in it’s collection from other states including
Kentucky and Utah. This would defiantly point to *Smilacina* being found
across the country. The map below shows where the samples in the
herbarium currently were collected.