

**TESTING SEED LONGEVITY VIA  
MSU CAMPUS ARCHAEOLOGY:  
APPLYING BEAL'S METHODS TO HISTORIC  
RASPBERRY SEEDS**



# Background & Questions, Pt 1

- Seeds excavated from privy during 2015 Campus Archaeology Program field season
- What was the importance of raspberries to an early student's diet?
- If they weren't important to diet, why were these seeds located in the privy
- Were these seeds a failed horticultural experiment?



# MSU and Berries

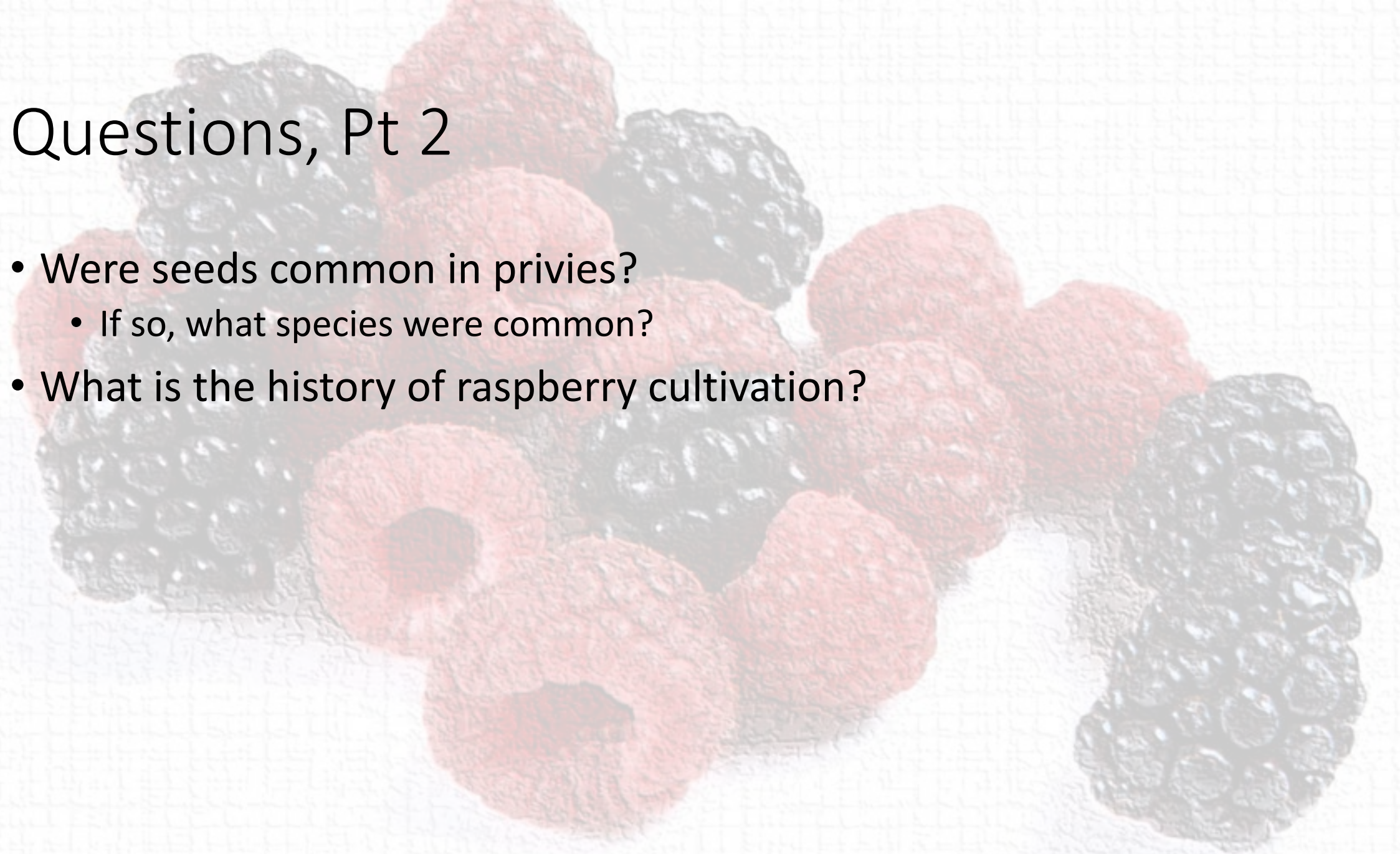
A cluster of raspberries and blackberries is shown on a white background with a faint grid pattern. The raspberries are a vibrant red color, while the blackberries are a deep, dark purple-black. The berries are piled together, with some showing their characteristic bumpy texture.

- Students would forage for berries
- Several pints of berries purchased for Saint's Rest residents
- Dr. Beal purchased 300 berry producing bushes to be planted on campus in 1875



# Questions, Pt 2

- Were seeds common in privies?
  - If so, what species were common?
- What is the history of raspberry cultivation?





# Archaeology of Privies and Berries



- Generally very common in privies
- Sites in which seeds were recovered include:
  - Portsmouth, New Hampshire
  - Virginia City, Nevada
  - Faneuil Hall, Boston, Massachusetts
  - Cross City Back Lot, Boston, Massachusetts



# Virginia City, Nevada

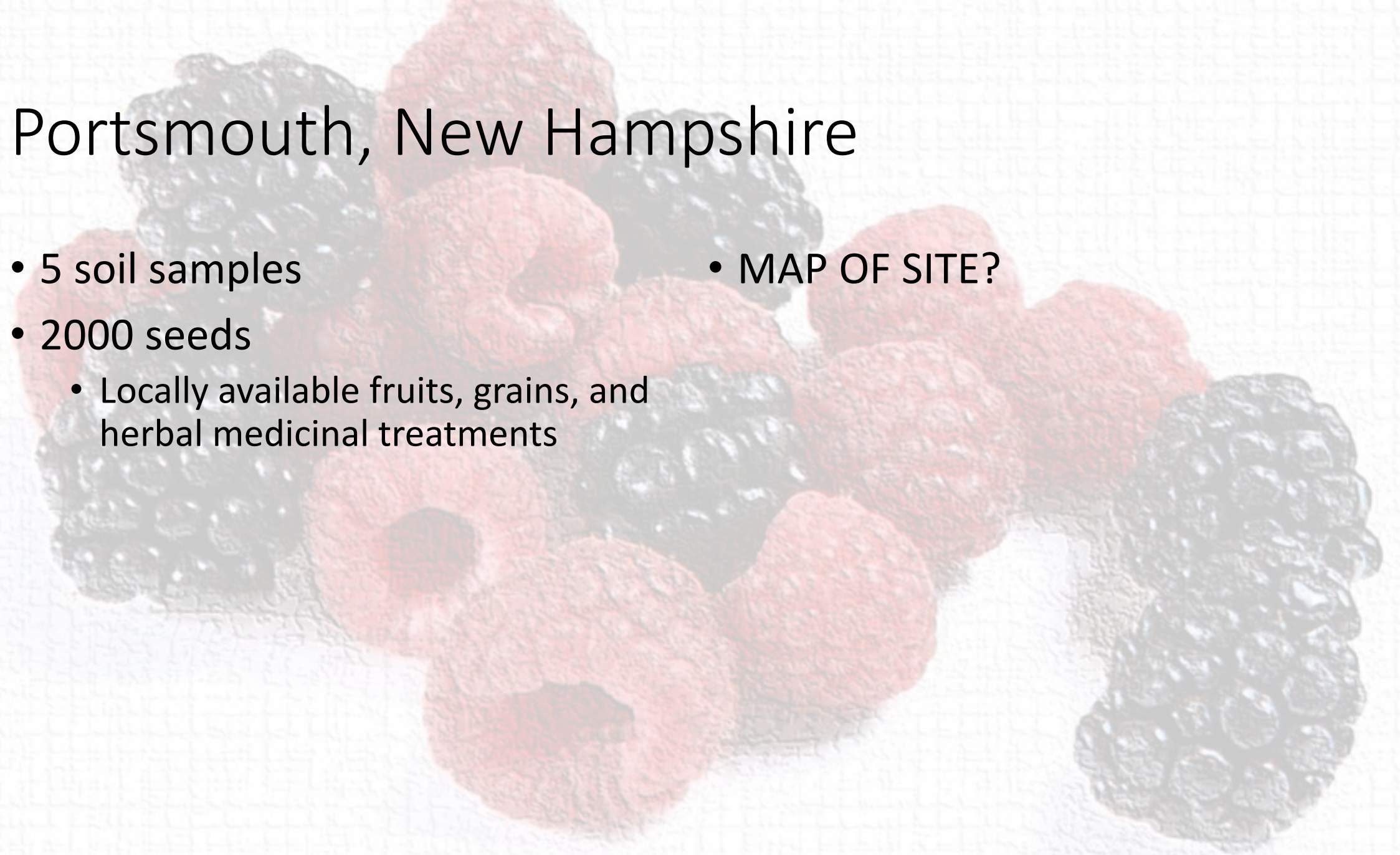
- Three soil samples
- Buckwheat and blackberry seeds in abundance





# Portsmouth, New Hampshire

- 5 soil samples
- 2000 seeds
  - Locally available fruits, grains, and herbal medicinal treatments
- MAP OF SITE?





# Faneuil Hall – Boston, Massachusetts



- 70 samples
- 1882 seeds
  - Pits, nutshells, conifer needles, preserved berries, aquatic plants
- 61 identified species
- Rubus (Raspberry and Blackberry) in 71% of samples



# Cross Street – Boston, Massachusetts

- 32 seed types
  - Plum, cherry, bramble (raspberry/blackberry), smartweed, and chenopodium





# Old World History of Raspberry Cultivation

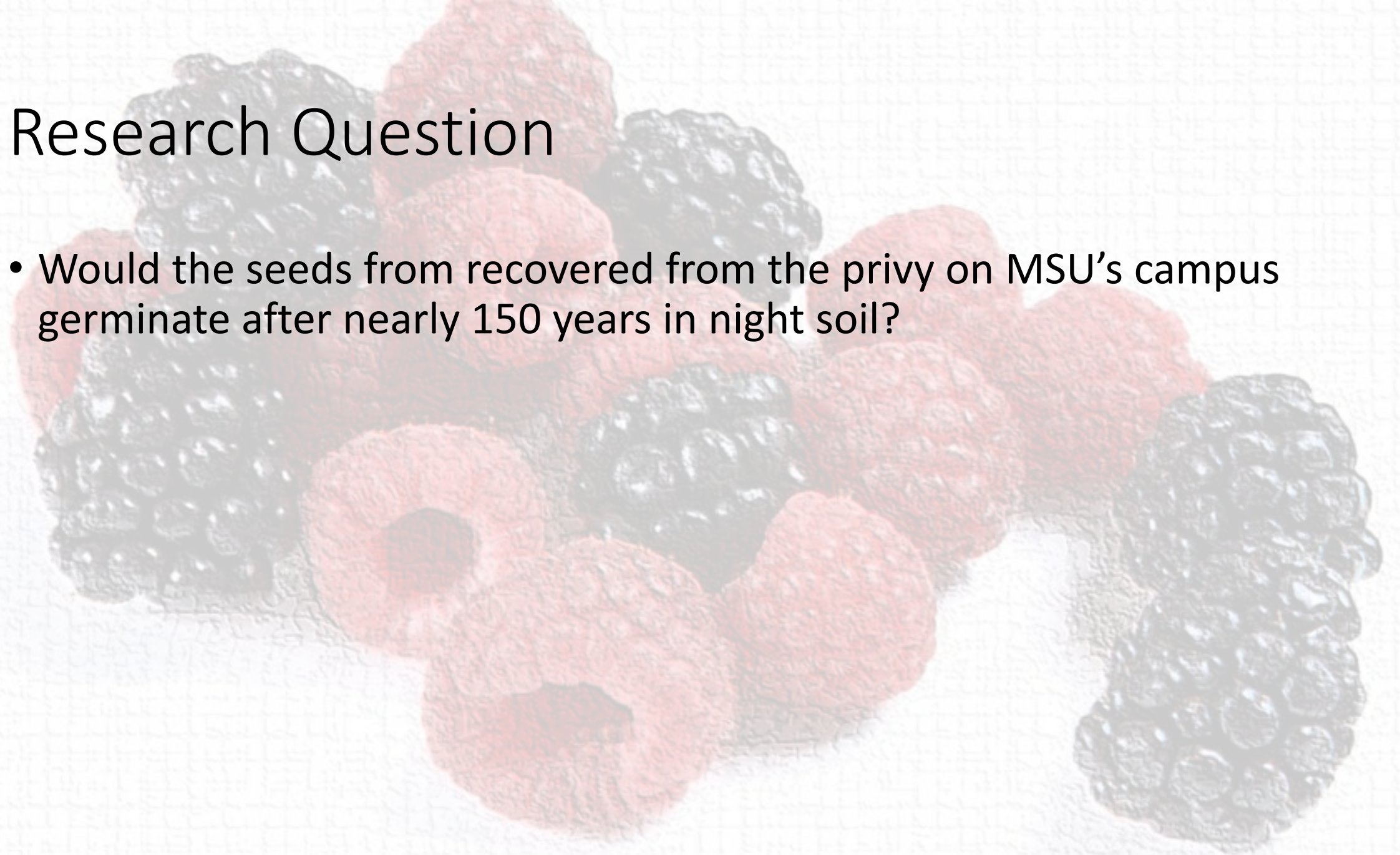


- Raspberries consumed by Greek gods in myths
  - Retrieved from Mount Ida – *Rubus idaeus*
- Romans cultivated raspberries around 4<sup>th</sup> century
  - Raspberries recovered from castles around that area
  - Neither wild, nor modern domesticated genotype
- In North America, widely cultivated by 19<sup>th</sup> century



# Research Question

- Would the seeds from recovered from the privy on MSU's campus germinate after nearly 150 years in night soil?





# Methods





# Results





# Discussion

