# Origin of the Autumn Damask Rose

Master Manus MacDhai, OL

Barony of Windmasters' Hill Kingdom of Atlantia

### Sonnet 54 by William Shakespeare

O H how much more doth beautie beautious feeme, By that fweet ornament which truth doth giue, The Rofe lookes faire, but fairer we it deeme For that fweet odor, which doth in it liue: The Canker bloomes have full as deepe a die, As the perfumed tincture of the Rofes, Hang on fuch thornes, and play as wantonly, When fommers breath their masked buds difelofest But for their virtue only is their flow; They live vnwoo'd, and vnrespected fade; Die to themfelues . Sweet Roles doe not fo, Of their fweet deathes, are fweeteft odors made: And fo of you, beautious and lovely youth, When that fhall vade, by verfe diftils your truth.

O, how much more doth beauty beauteous seem By that sweet ornament which truth doth give! The rose looks fair, but fairer we it deem For that sweet odour which doth in it live. The canker-blooms have full as deep a dye As the perfumed tincture of the roses, Hang on such thorns and play as wantonly When summer's breath their masked buds discloses: But, for their virtue only is their show, They live unwoo'd and unrespected fade, Die to themselves. Sweet roses do not so; Of their sweet deaths are sweetest odours made: And so of you, beauteous and lovely youth, When that shall vade, my verse distills your truth.

### Introductions

# Let's get to know each other a little bit

- Name
- Where you hail from in the SCA
  - Where is that mundanely?
- Level of experience with roses
- What brought you here today

# Topics

#### What I will talk about ...

- An Overview of Roses
- Roses in Europe prior to 17th Century
- Focus: The Autumn Damask
  - Where did it come from?
  - How did it get to Europe?
  - What makes it special?

 Flowering shrub known for its beautiful, often fragrant, flowers and its "thorns" (correct term is 'prickles')

#### What is a rose?





#### What is a rose?

- Members of the Rosaceae family
- Over 190 species of roses and tens of thousands of cultivars
- Only 10 contributed to the roses we cultivate today
- 3 of those have contributed the trait of remontancy (repeat blooming)

### **Global Distribution of Roses**

- Native to the Northern Hemisphere
- Mostly temperate but found from semi-tropical to sub-artic
- Fossil evidence
  - 70 Million years ago in Asia
  - 35 Million years in North America

#### Roses in ancient civilizations

- Cultivated for at least the past 5000 years
- Oldest known written records are cuneiform tablets from Mesopotamia dated about 2600 BCE
- Egyptian tomb painting dating from 14th Century BCE
- Known to be cultivated in Babylonia and Assyria
- Purpose for cultivation: production of rose water

Roses in Europe prior to the 17th Century

Native species roses

- R. canina (Dog Rose)
- R. phoenicia
- R. persica
- Others

Roses in Europe prior to the 17th Century

**Ancient Hybrids** 

- Alba
- Centifolia
- Musk (R. moschata)
- Gallica
- Damask

### Gallica Roses

Apothecary Rose

R. gallica officinalis

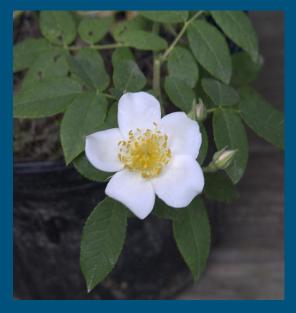
Before 1250



© Philip Scott Dean

### Musk Roses

#### Musk Rose: Rosa moschata



© Philip Scott Dean

#### Double Musk Rose: *Rosa moschata plena* (Before 1513)



Creative Commons (CC BY 2.0) from flickr by Malcom Manners

#### R. x damascena

### **Characteristics**

- Large number of petals (> 20)
- Bushy habit
- Very Fragrant
- Used to make rose water
  - (This is important later)
- Most bloom only once a year
  - but there is one exception...

York and Lancaster

R. damascena 'Versicolor'

Before 1551



Wikimedia Commons (CC BY-SA 3.0) by A. Barra

Kazanlik

R. x damascena 'Trigintipetala'

Before 1612



© Philip Scott Dean

Autumn Damask / Quatre Saisons

Rosa damascena bifera

Before 1633



© University of Goettingen - Michael Schwerdtfeger

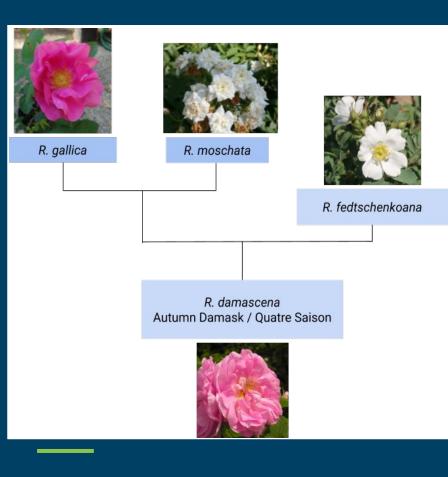
## Genetic Study of Damask Roses

Iwata H, Kato T, Ohno S. "Triparental origin of Damask roses." *Gene*. Dec 2000

- The Damask Rose is a complex hybrid where a hybrid cross of *R. gallica* & *R. moschata* crossed with *R. fedtschenkoana*
- The crosses occurred several thousand years ago
- The resulting hybrid has been propagated vegetatively since then.

"Geneology" Chart for

the Autumn Damask Rose



## *Rosa fedtschenkoana*

 Native to the Ala Tau, Tian Shan, and Pamir-Alai mountain ranges in central Asia and northwestern China



## *Rosa fedtschenkoana*

- One of only a few rose species that are remontant (repeat blooming)
- *R. chinensis* & *R. rugosa* being the primary other species
- All are native only to Asia

### Remontancy

### The trait for continual blooming

- Repeat blooming is an attractive trait from our point of view
- These roses have a gene that suppresses the protein that blocks blooming after the initial bloom cycle.
- It has also been studied in strawberries, another member of the Rosaceae family.

# Questions:

- How is it that these three rose species managed to hybridize?
- How did the resulting hybrid get to Europe?

Robert Mattock's 2017 doctoral dissertation

#### 'Silk Road Hybrid'

Cultural linkage facilitated the transmigration of the remontant gene in Rosa x damascena, the Damask rose, in circa 3,500 BCE from the river Amu Darya watershedin Central Asia, the river Oxus valley of the Classics, to Rome by 300 BCE.

-- University of Bath, 2017

## Mattock's Findings

 The ranges of the three rose species, R. gallica, R. moschata, and R. fedtschenkoana do overlap in the region of the river Amu Darya watershed in Central Asia, known as the river Oxus valley in antiquity.

Previous



[Map.9]. The geographical distribution of the parents of R. x damascena and their overlap indicating the point of origin of R. x damascena

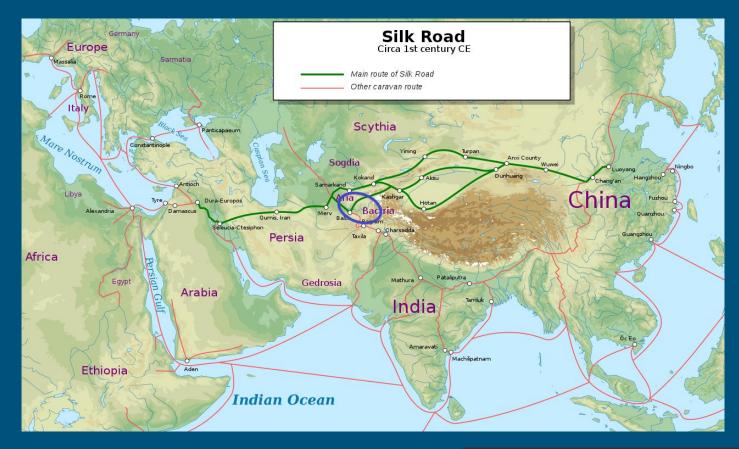
Rosa moschata Rosa gallica Rosa fedtschenkoana





## Mattock's Findings

 This area was along one of the historic trade routes that has come to be known as the Silk Roads.



Silk Road and the Origin of Damask Rose

By User:Kaidor - File:Silk Road in the I century AD - ru.svg, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=71237789



Silk Roads map detail

By User:Kaidor - File:Silk Road in the I century AD - ru.svg, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=71237789

## Mattock's Findings

 The Autumn Damask rose migrated west, from its area of origin to Europe, as the result of trade and commerce.

## It's all about the Rose Water

- Since the beginning of written history to this day, widely used in central Asia, India, and what we call today the Middle East.
- Uses:
  - Medicinal
  - Hygiene
  - Cosmetic
  - Culinary
  - Religious



[Map 1] showing the extent of rose water production and therefore *R. damascena* 3500 BCE to 500 AD<sup>cdili cdv</sup>

Anatolia, Turkey, Syria, Iran, Morocco, Algeria, Libya, Aligarh, Ghazipur and Kannauj, India. Persia

## Rose Water, Rose Oil, Attar of Roses

**Ancient Production Methods** 

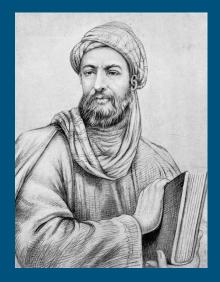
- Rose water or "Rose petal Tea"
  - Soak large quantities of fresh rose petals in hot water and strain
- Rose "oil"
  - (prior to the invention of distillation)
    - Same general process using hot olive oil instead of water

## Rose Water, Rose Oil, Attar of Roses

#### **Modern Production Method**

- Steam distillation to extract and concentrate the essence of rose (the volatile oils)
  - Rose water is the hydrosol product of the distillation process, basically the water that is left over after the distillation process is complete.
- Other more modern methods include using alcohol or other solvents to extract the volatile oils.

## Ibn Sina or Avicenna



- Ibn Sina, often known in the West as Avicenna
- Lived c. 980 June 1037
- Persian polymath regarded as one of the most significant physicians, astronomers, thinkers and writers of the Islamic Golden Age (8th century to the 14th century.).
- Credited with creating the steam distillation process

## Questions?

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Madonna of the Rose Bush by Martin Schongauer (1473)

# Finis