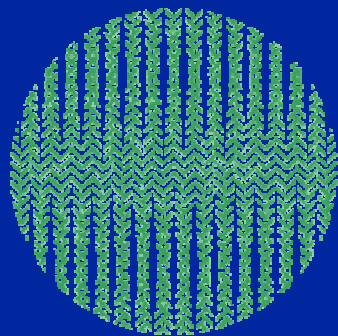


Iconography of Solanaceae: Antiquity to the 17th Century

Marie-Christine Daunay, Jules Janick
& Henri Laterrot

INRA, UGAFL, Montfavet, France
Purdue University, West Lafayette, IN, USA



INRA



Solanaceae Species

OLD WORLD

Mandrake

Mandragora spp.

Henbane

Hyoscyamus spp.

Belladonna

Atropa belladonna

Nightshades

Solanum nigrum aff.

Eggplant

Solanum melongena

Solanaceae Species

NEW WORLD & OLD WORLD

Alkekengi (OW)

Physalis alkekengi

Husk tomato (NW)

Physalis spp.

Downy thornapple (OW)

Datura metel

Downy thornapple (NW)

Datura innoxia

Jimsonweed (NW)

Datura stramonium

Solanaceae Species

NEW WORLD

Tomato

Solanum lycopersicum =
Lycopersicon esculentum

Capsicum pepper *Capsicum* spp.

Potato

Solanum tuberosum

Tobacco

Nicotiana spp.

Two main sources of images



paintings



Dege Rudolf Speckle formschneider.



woodcuts

Sources

- **Pre-Columbian Documents**
- **New World Documents**
- **Medieval Manuscripts**
- **Renaissance Herbals**



Otto Brunfels
1464–1534



George Oellinger
1487–1557



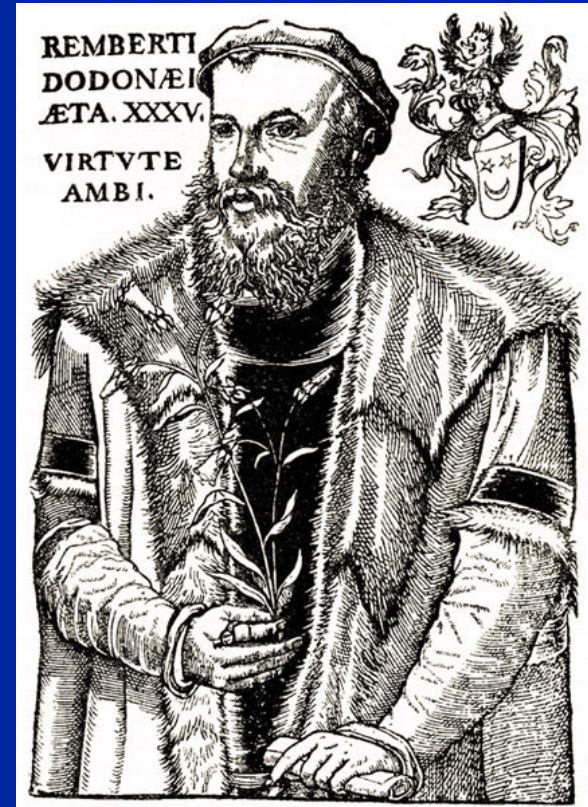
Leonhart Fuchs
1501–1566



Pier Andrea Mattioli
1501–1577



Jacques Dalechamp
1513–1588



Rembert Dodoens
1517–1585



Ulisse Aldrovandi
1522–1605



Charles de L'Écluse
1526–1609



Mathias de L'Obel
1538–1616



John Gerard
1545-1612



Gaspar Bauhin
1560-1624



Besler
1561-1619



John Parkinson
1567–1629

Other herbalists used

Castor Durante, 1520–1590

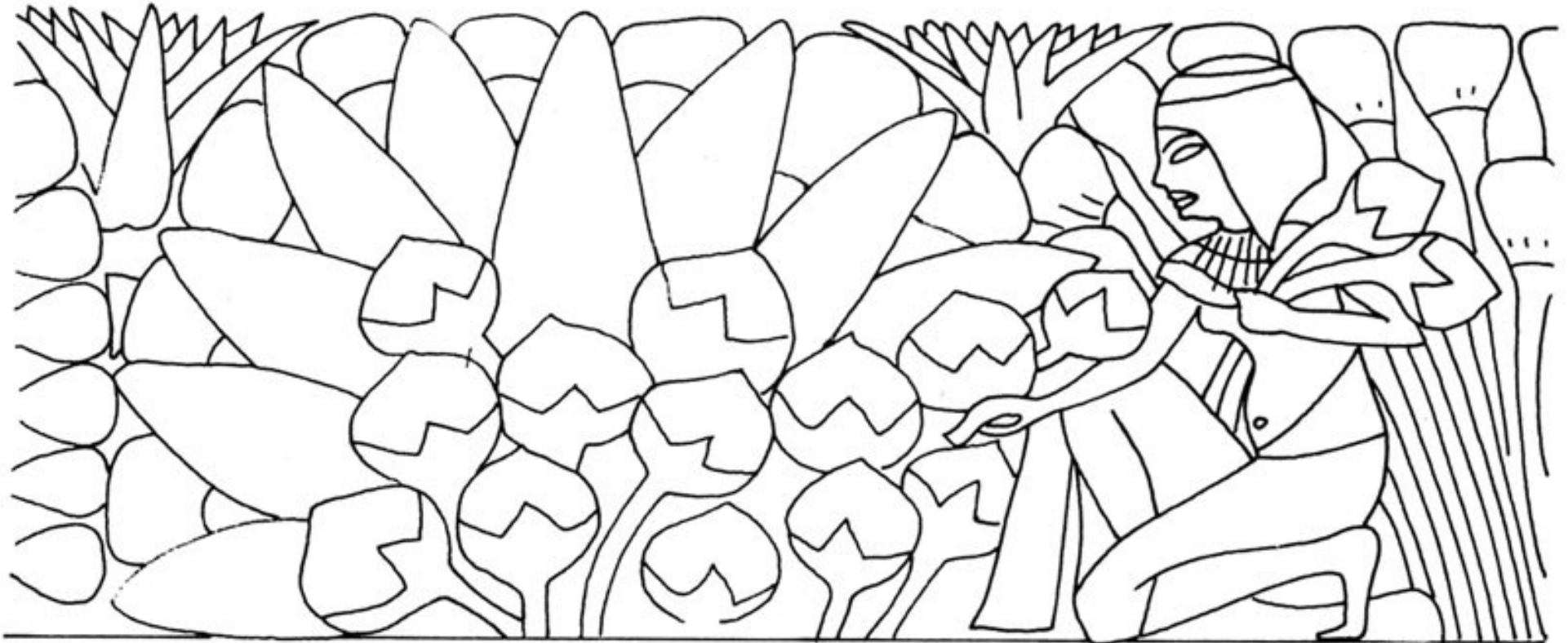
Adam Lonicer, 1528–1586

Jacobi Zanoni, 1615–1682

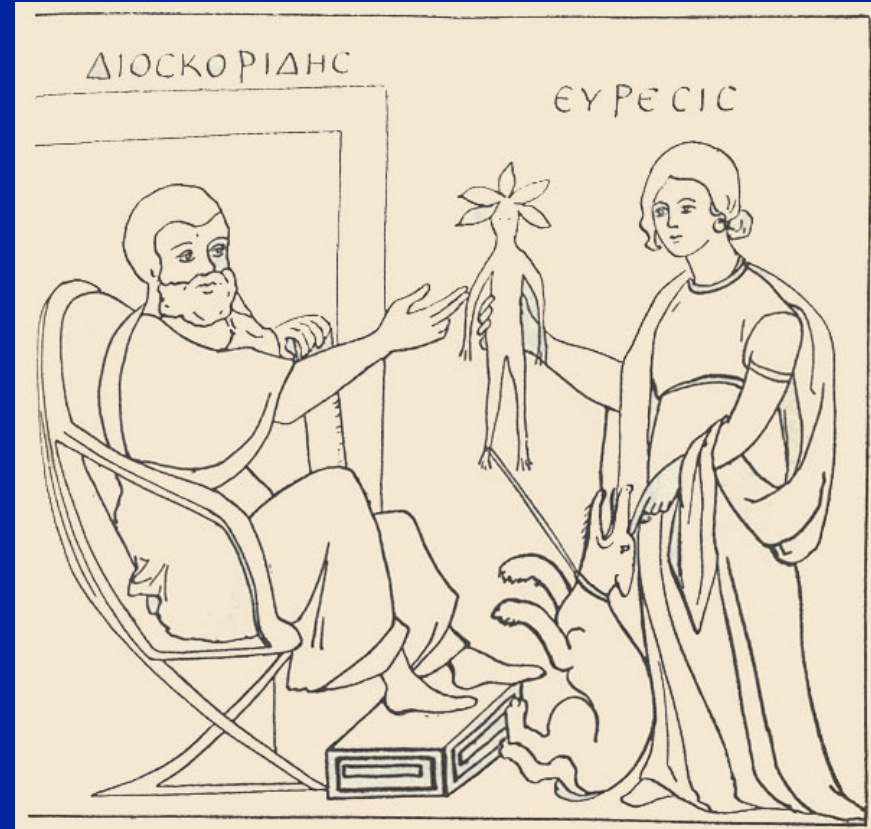
Zuingeri, 1658–1724

Mandrake

Harvesting fruits from ivory casket of
Tutankhamun 1327 BCE

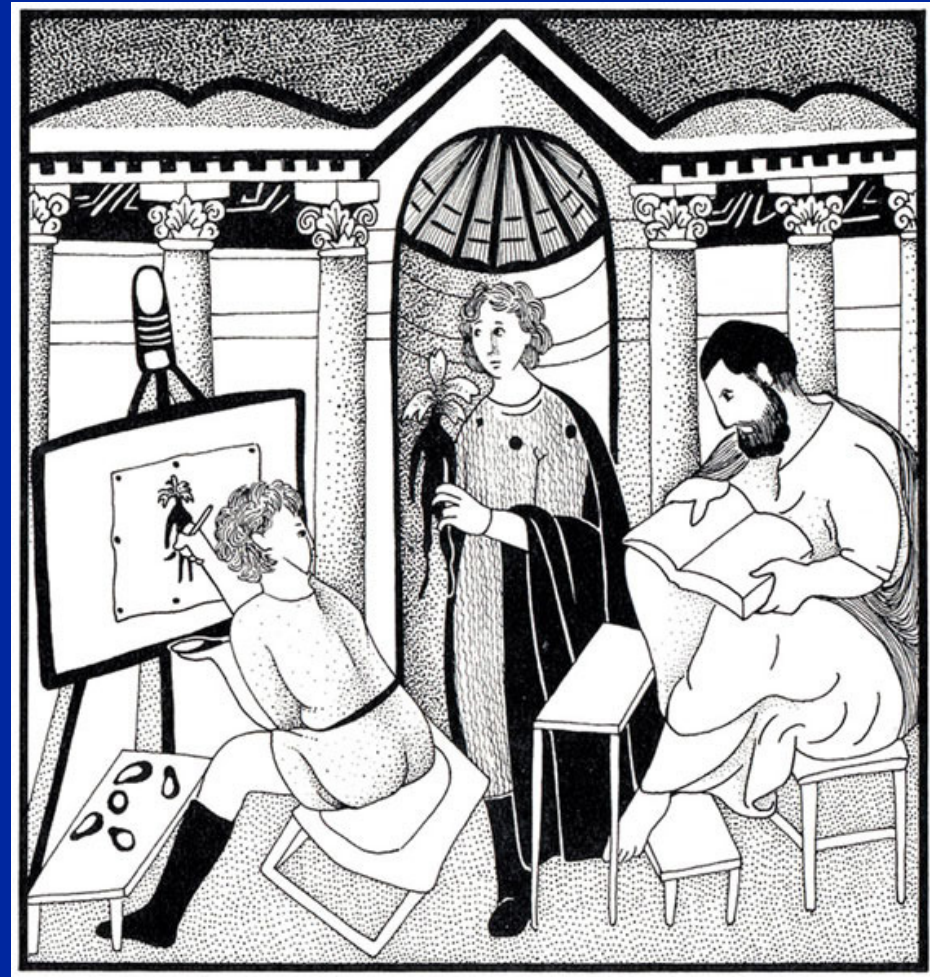


**Dioscorides ca. 512, Aniciae Julianae Codex
Dioscorides receiving mandrake from the nymph Epinoia
(Discovery) for Krateuas to paint.**

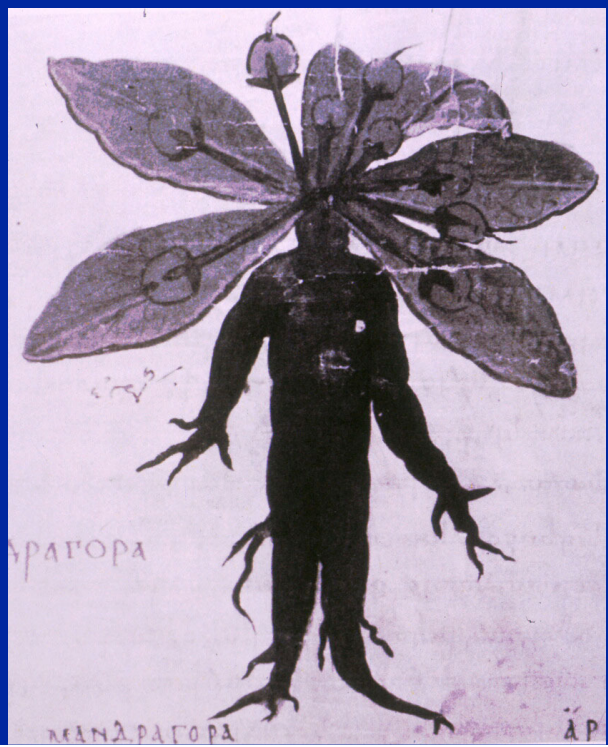
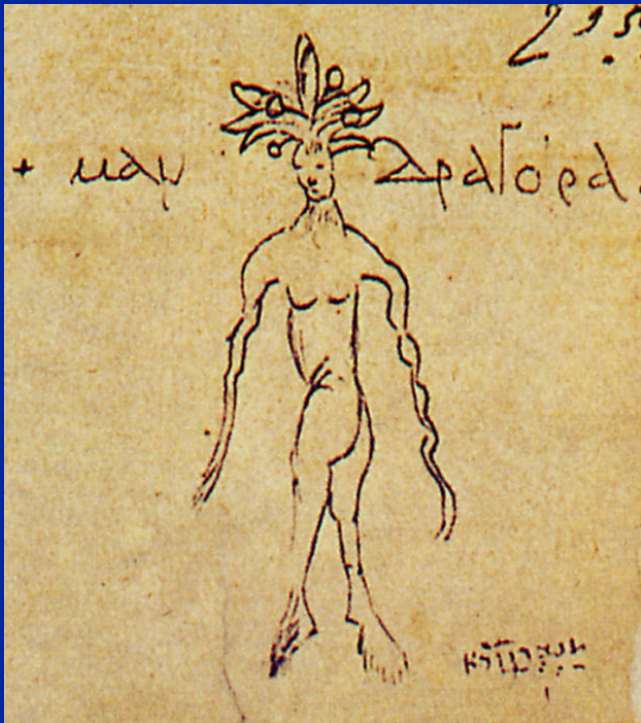


Dioscorides ca. 512, Aniciae Julianae Codex

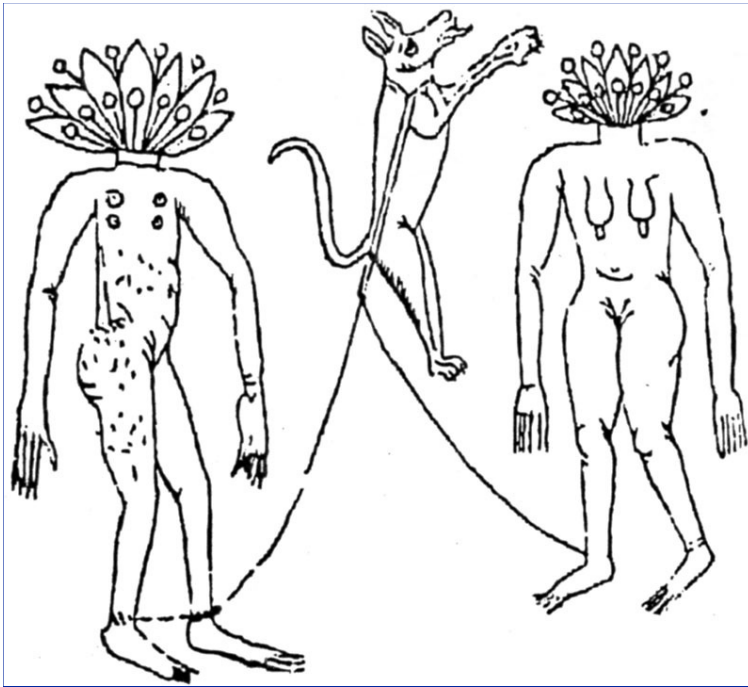
Krateuas painting mandrake



Dioscorides ca. 512



10th C



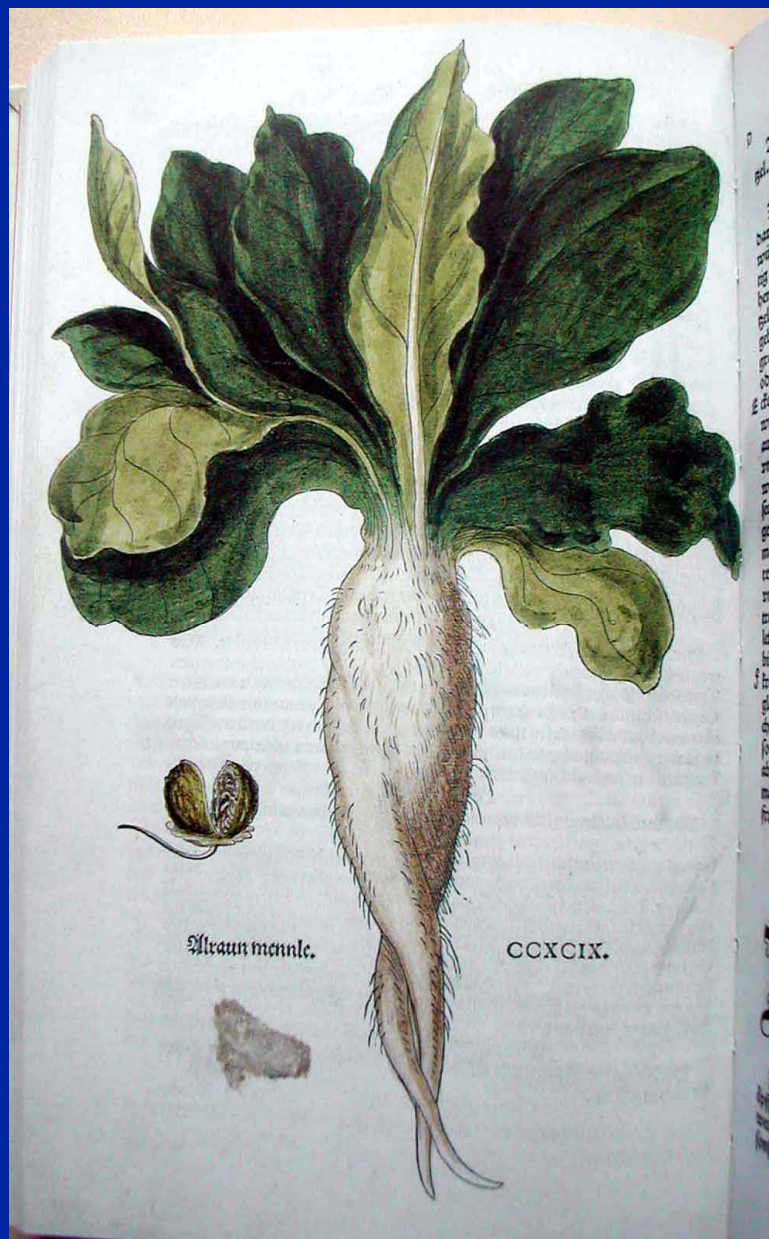
Hertensis 9th C



Tacuinum Sanitatis
15th C

Pflanzenbuch
1500





Fuchs 1543



Lobel 1576



Aldrovandi
2nd half 16th C



Besler 1613

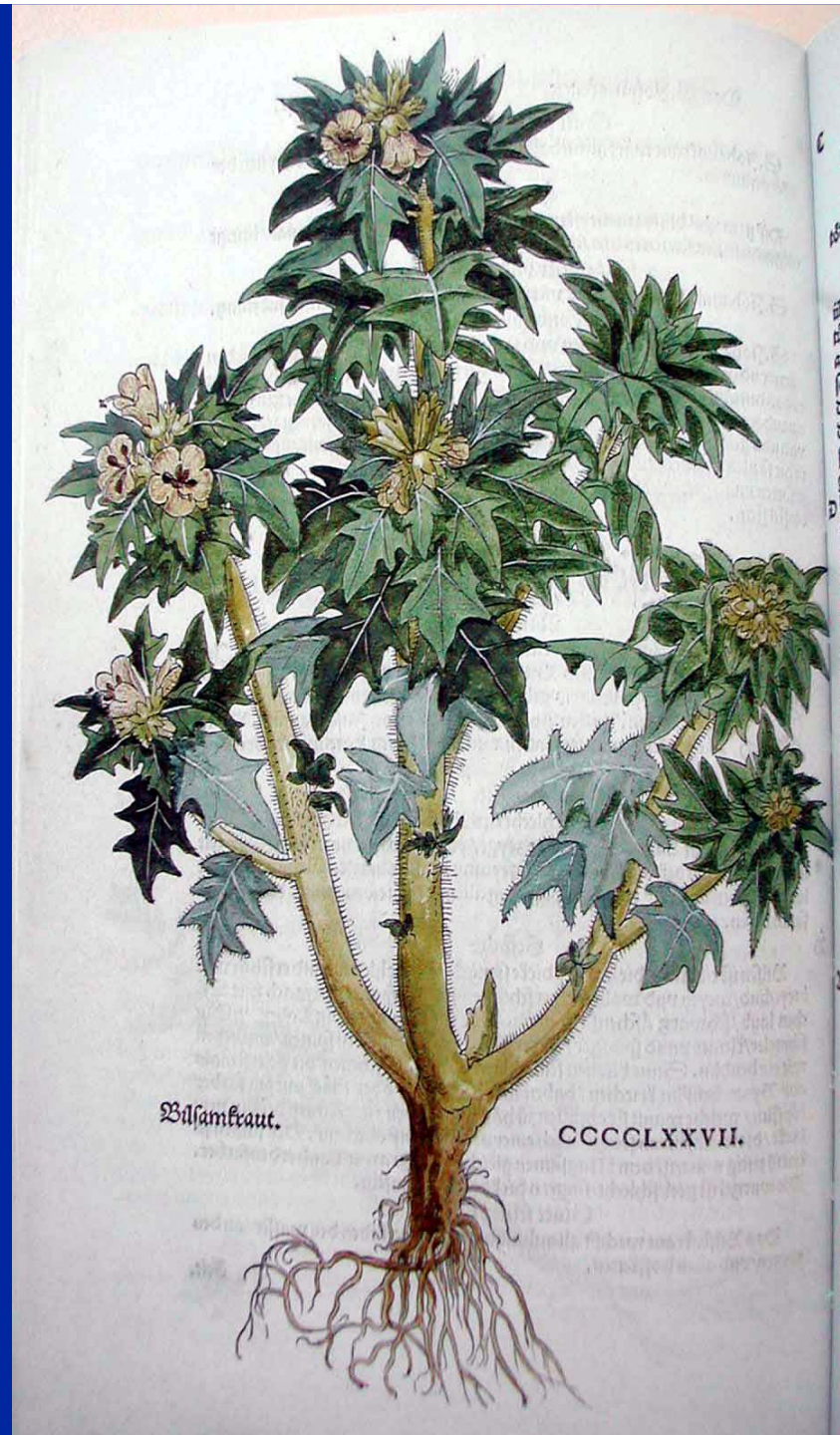
Henbane

(black, yellow, white)

Dioscorides
8th C




Fuchs 1543



Lobel 1576 (black, white, yellow henbane)



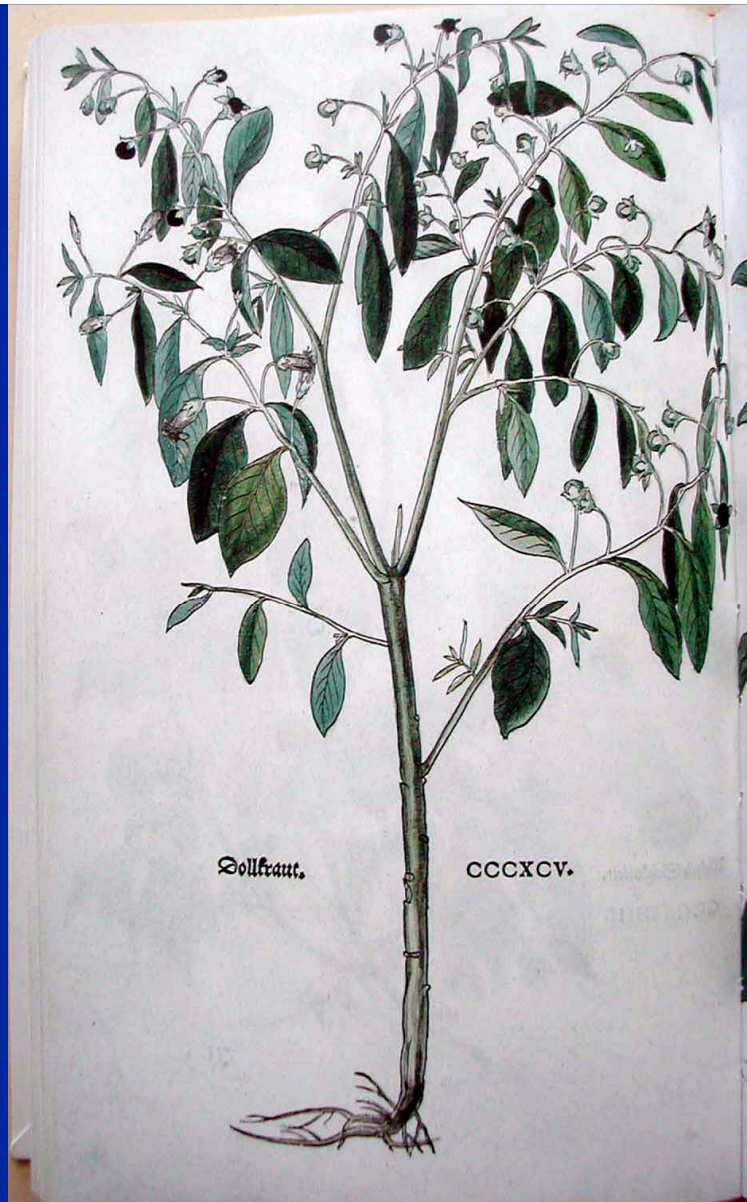
Belladonna

Da nobis hodie et quotidie vsum
penitentie abstinentie patientie
humilitatis castitatis ieiunij sci-
fium et intellectum: et purum con-
scientiam vobis in finem. Jesu vix
saluator mundi. Qui vivis et
regnas cum deo patre in unitate
spiritus sancti deus. Rex omnia
secula seculorum. Amen. 

Barfin?



Horae ad usum romanum
1503–1508



Fuchs 1543



Aldrovandi 2nd half 16th C

Lobel 1576



Nightshades (Nachtschatten)

Dioscorides
512





Schöffer, Herbarius Horae ad usum
 1485 romanum 1503–1508

Manfredus de Monte Imperiali, de herbis
 1330–1340

Fuchs 1543



Manfredus de Monte Imperiali, de herbis 1330–1340



Fistularia est una herba
 nomen fistularia est
 nomen autem taglaffara
 et esse herba ressemblable amara
 ne mais elle est plus verte et
 si a semence sur le. Jaune come
 quinte feuille. Elle a petite li
 me qui a conlem sur le tony
 elle croist en montaignes et
 en hery perreny. Et vaulx puer
 pulment pour parer fistules am
 si son leide bionc et mise sur ou
 le jus en son verte ou tron de la
 fistule elle y vaulx mouli la po
 dre uny de ceste herbe mis sur
 pluce les veines et fistule de
 meucillensement



Livre des simples medecines Mid 15th C

Eggplant

茄子

蓬蒿味甘平無毒主通利腸胃安心氣消水飲



茄子味甘寒有小毒動風發瘡及痼疾不可多食

Hu Sihui 1330



Sancai Tuhui
mid 17th C



18th C



植物名實圖考
卷四 蔬類 茄

Zhiwu Mingshi Tukao 1858

Manfredus de Monte Imperiali, de herbis 1330–1340



Tacuinum sanitatis



1385–1390



15th C

Tacuinum sanitatis 1390–1400



Manuel des vertus vegetaux, animaux 1480





Fuchs 1543



Aldrovandi 2nd half 16th C

Besler 1613



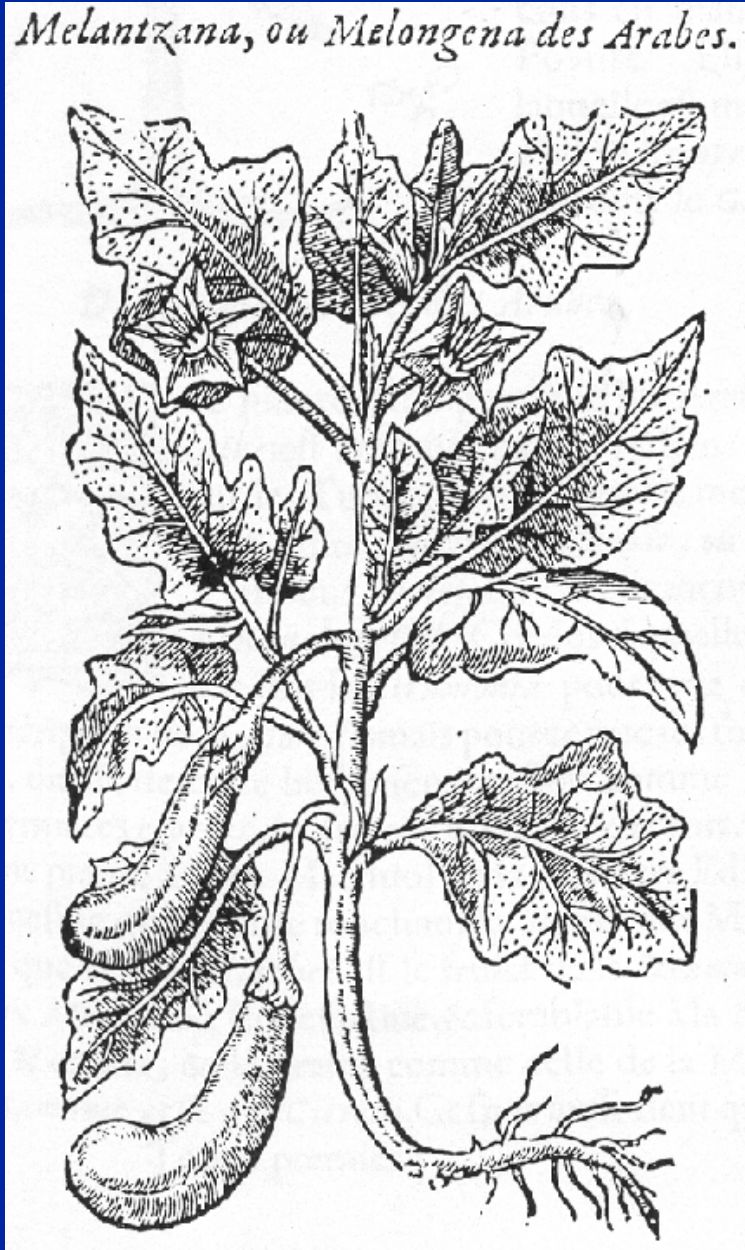
Melanzana fructu pallido.



Melanzana fructu pallido.

Dalechamp 1653

Melanzana, ou Melongena des Arabes.



Melanzana noire.



**Archimboldo
Autumn 1573**



Pisa Cathedral 1601



Alkekengi



Dioscorides ca. 512



Dioscorides 7th C



Manfredus de Monte
Imperiali, de herbis
1330–1340



Bartholomaeus mini,
tractatus de herbis 2nd
half of 15th C

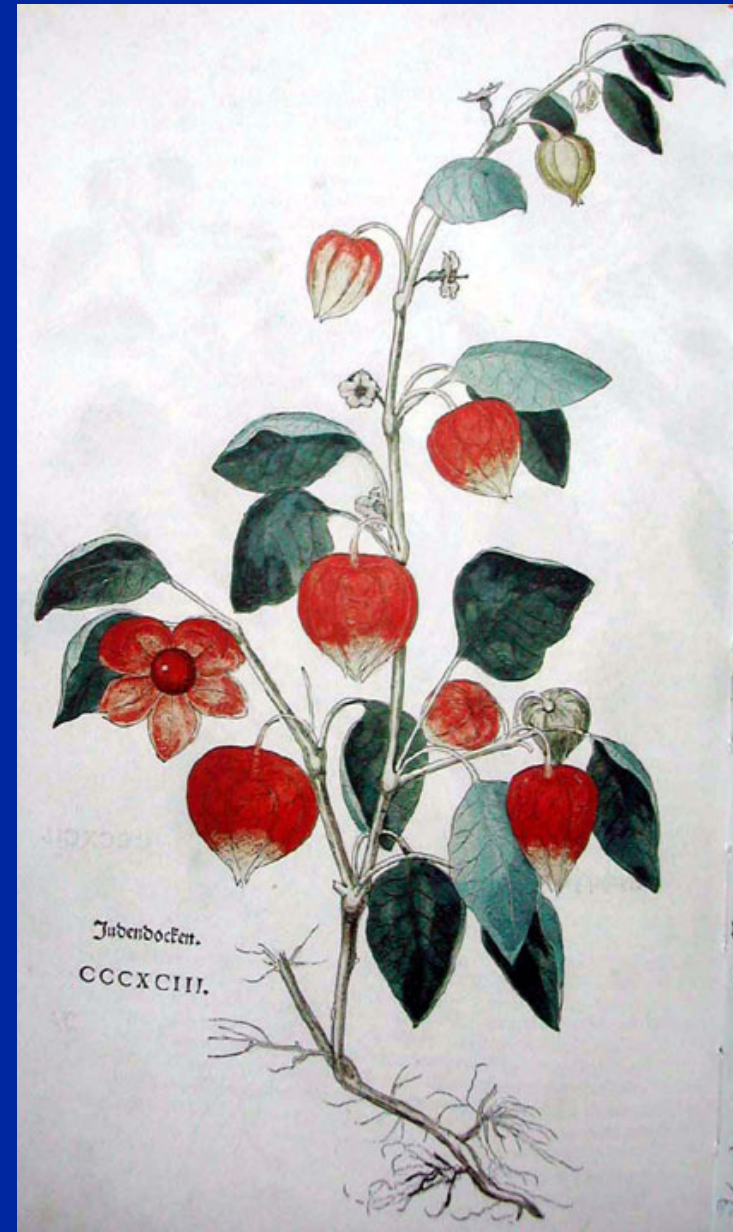


Horae ad usum romanum
1503–1508

Codex bellunensis 15th C

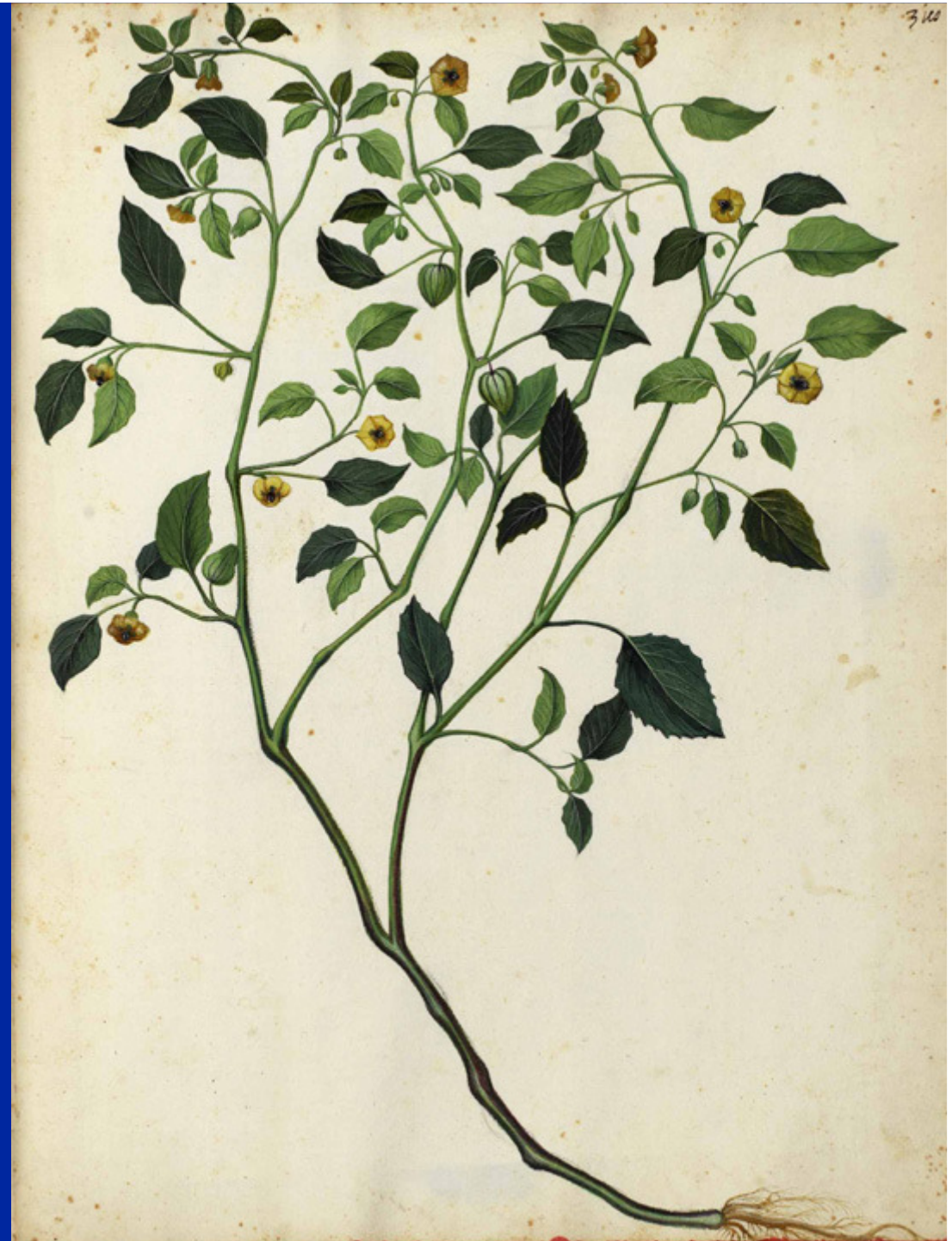


Fuchs 1543



Husk Tomato

Aldrovandi 16th C



Besler 1613



Hernandez 1651

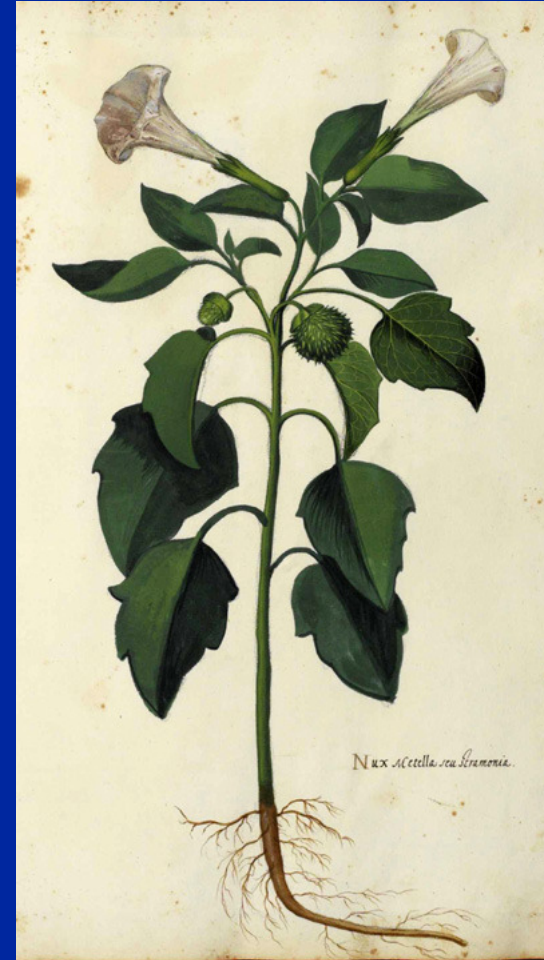


Downy Thornapple Old World

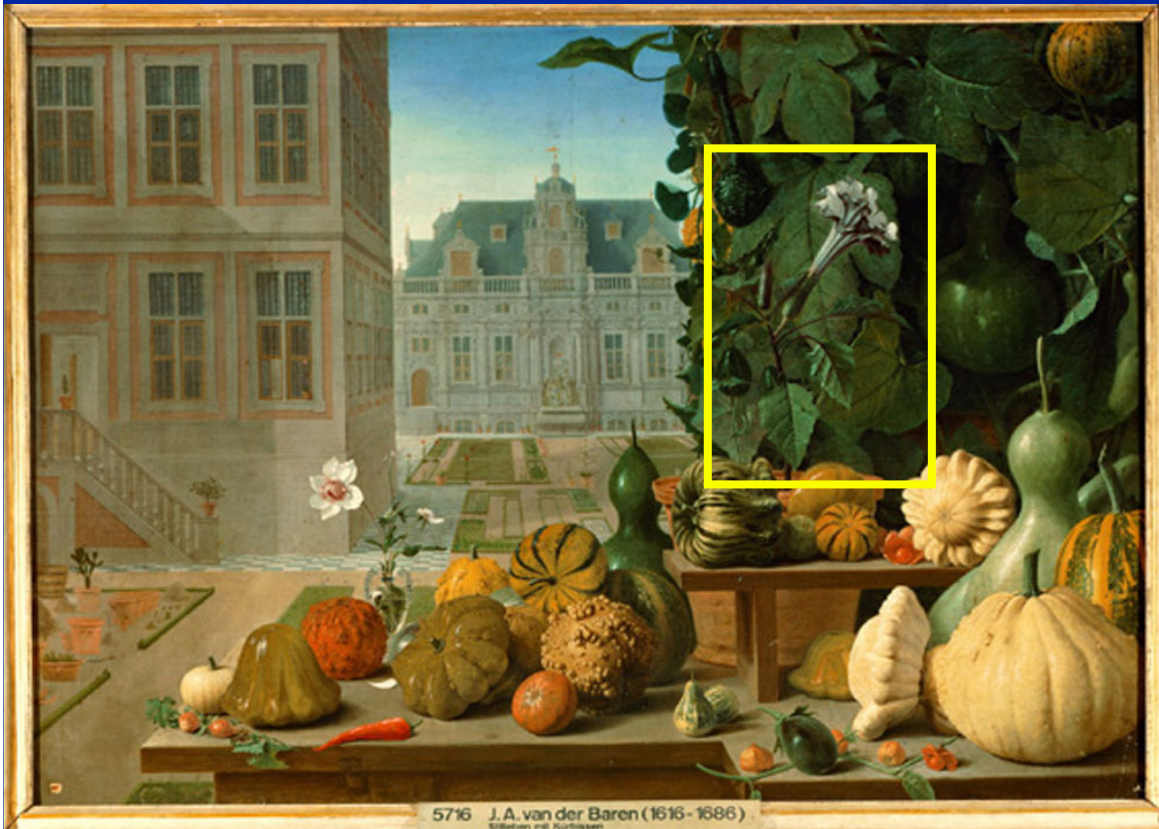
Datura metel



Ollinger 1553



Aldrovandi 2nd half 16th C



Still Leben mit Kurbissen ca. 1650

Besler 1613



Downy Thornapple
Datura innoxia

Fuchs 1543



Jimsonweed

Datura stramonium

Florentine Codex 1540–1585



Aldrovandi 2nd half 16th C



Dodoens 1608

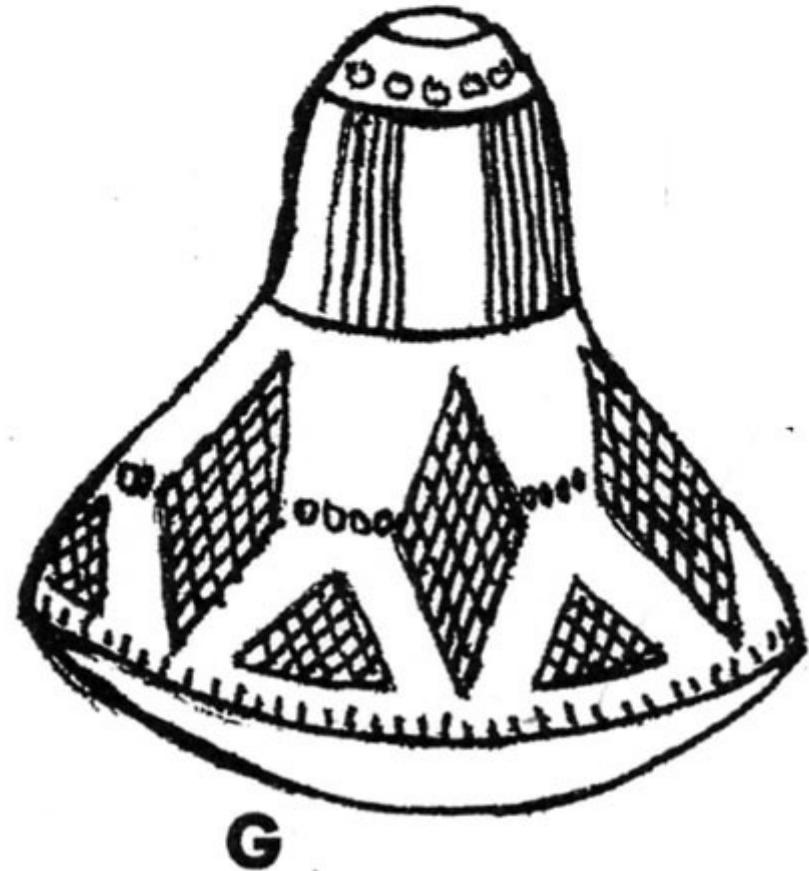


Besler 1613



Tomato

Columbia 900–915 CE
McMeekin, 1992

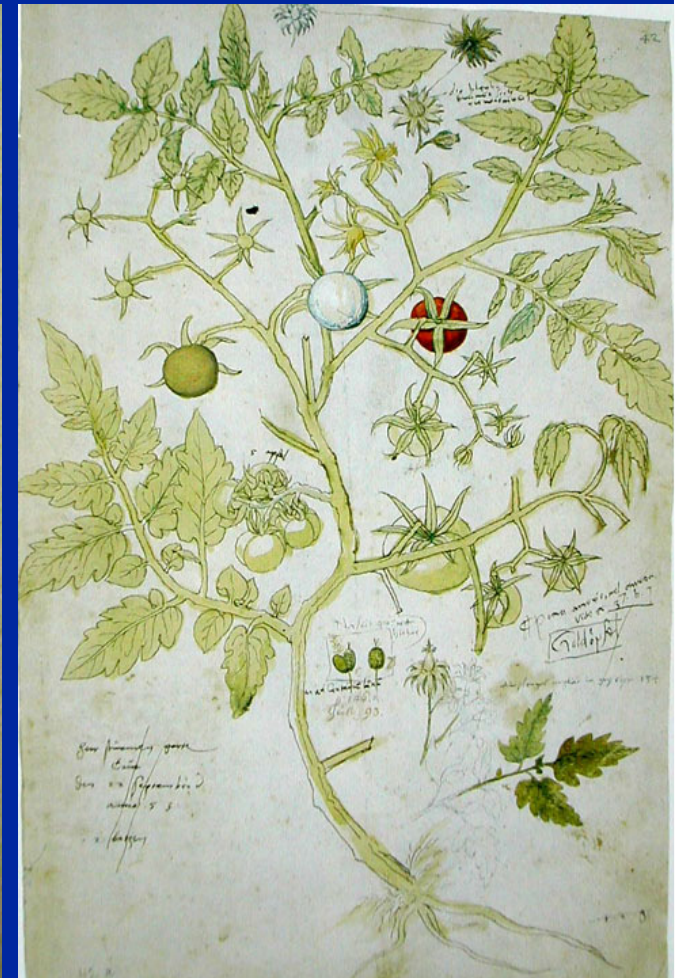




Fuchs
unpubl. 1549–1556

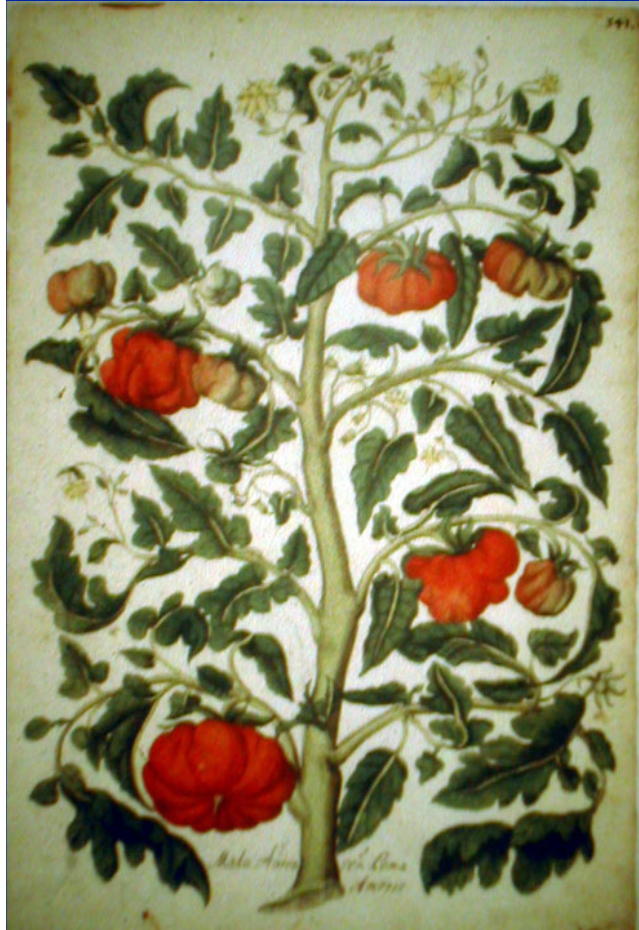


Dodens 1553



Gessner
unpubl. 1553

Ollinger 1553



AVREA MALA.



Dodoens 1574

POMA AMORIS



Matthioli 1586

Pisa Cathedral

1601





Besler 1613

Capsicum Pepper



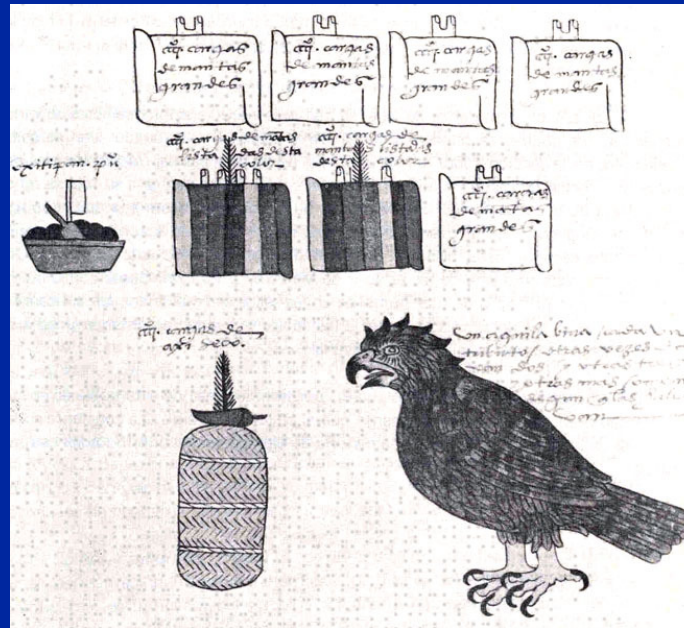
Peru 400–500 CE



H

Mexico 500–1500

Mexico, Codex Mendoza 1542



**Codex Amphibiorum
1540**



Fuchs 1543



Capsicum annuum



Capsicum chinense?

Ollinger 1553



Capsicum annuum



Capsicum chinense?

Lobel 1576



Capsicum pubescens?

Aldrovandi 16th



Capsicum annuum

Pisa Cathedral 1601

Besler 1613



Capsicum annuum

Capsicum baccatum?

Potato

Proto-Chimu period pre-columbian, 200 CE



Chimu period pre-columbian, 900



110129

TRAVAXO PAPAOCATARPVIPACHA



Fig. 2.11 Digging with a foot-plough and planting potato tubers, December. (Source as for Fig. 2.10.)

110417

TRAVAXOS PAPAALLAIMITAPA



Fig. 2.13 Potato harvesting with foot-plough and hoe, June. (Source as for Fig. 2.10.)

Filipe Guaman Poma de Ayala 1615, Peru

Plantin Collection 16th C



Gerarde 1597

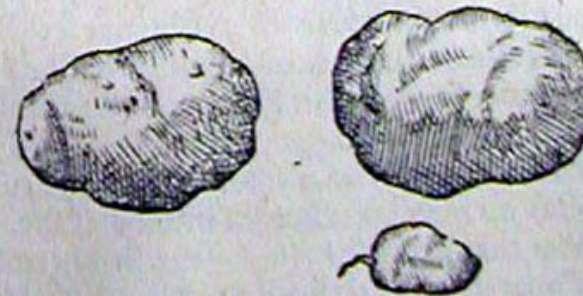
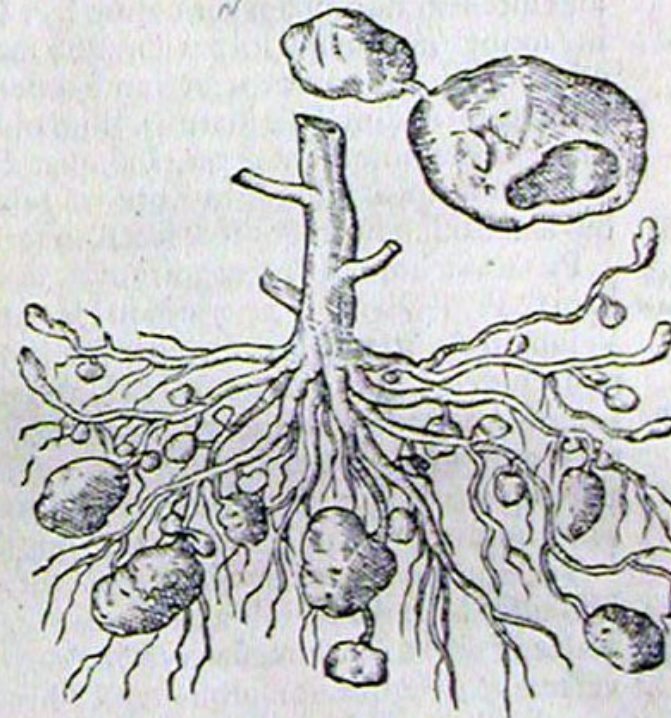
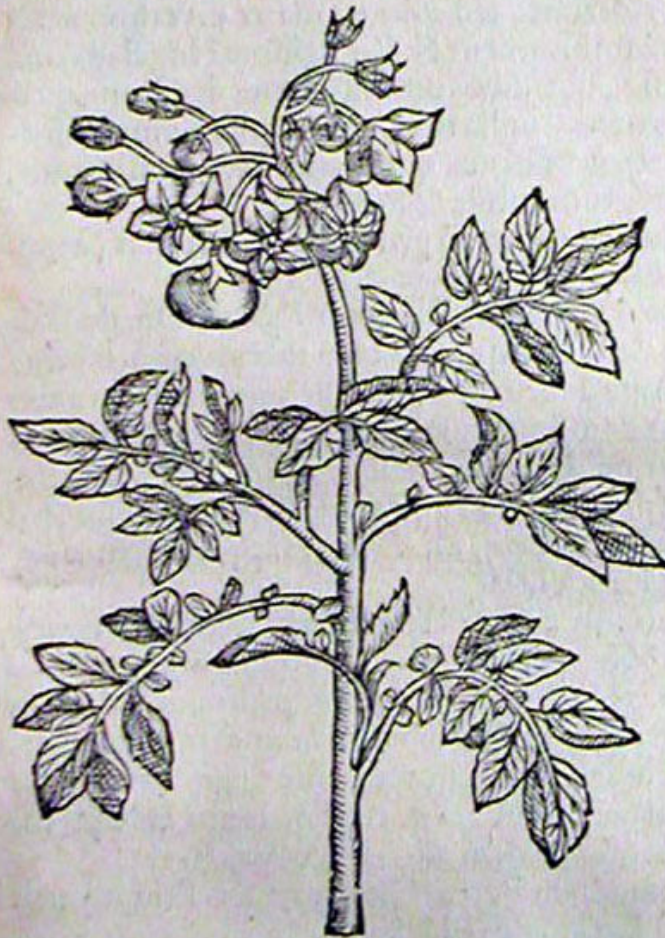


Clusius 1601

ARACHIDNA THEOPH. fortè, Papas Peruānorum.

CAP. LII.

Arachid. Theoph. fortè, Papas, radix.



*Solanum tuberosum, L.
Kuhn. dicit.
Sp. hist.
N. 604. 60*

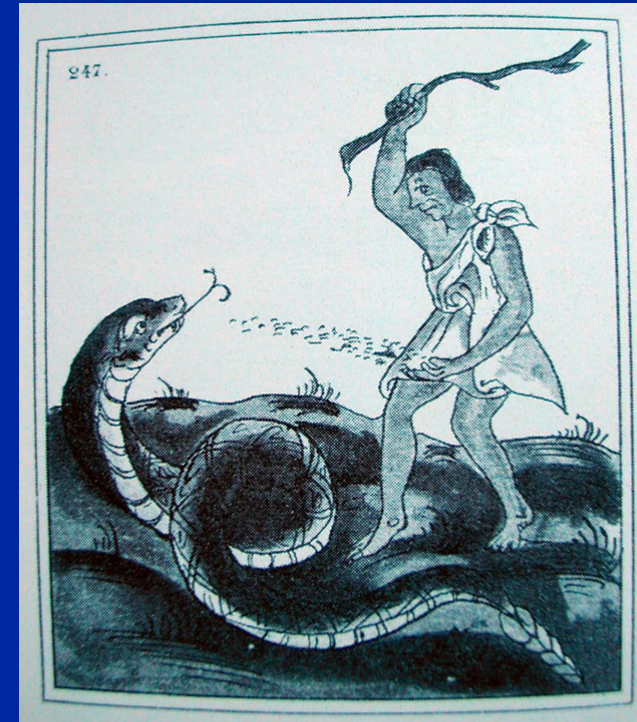
Besler 1613



Tobacco



Badianus manuscript, 1552



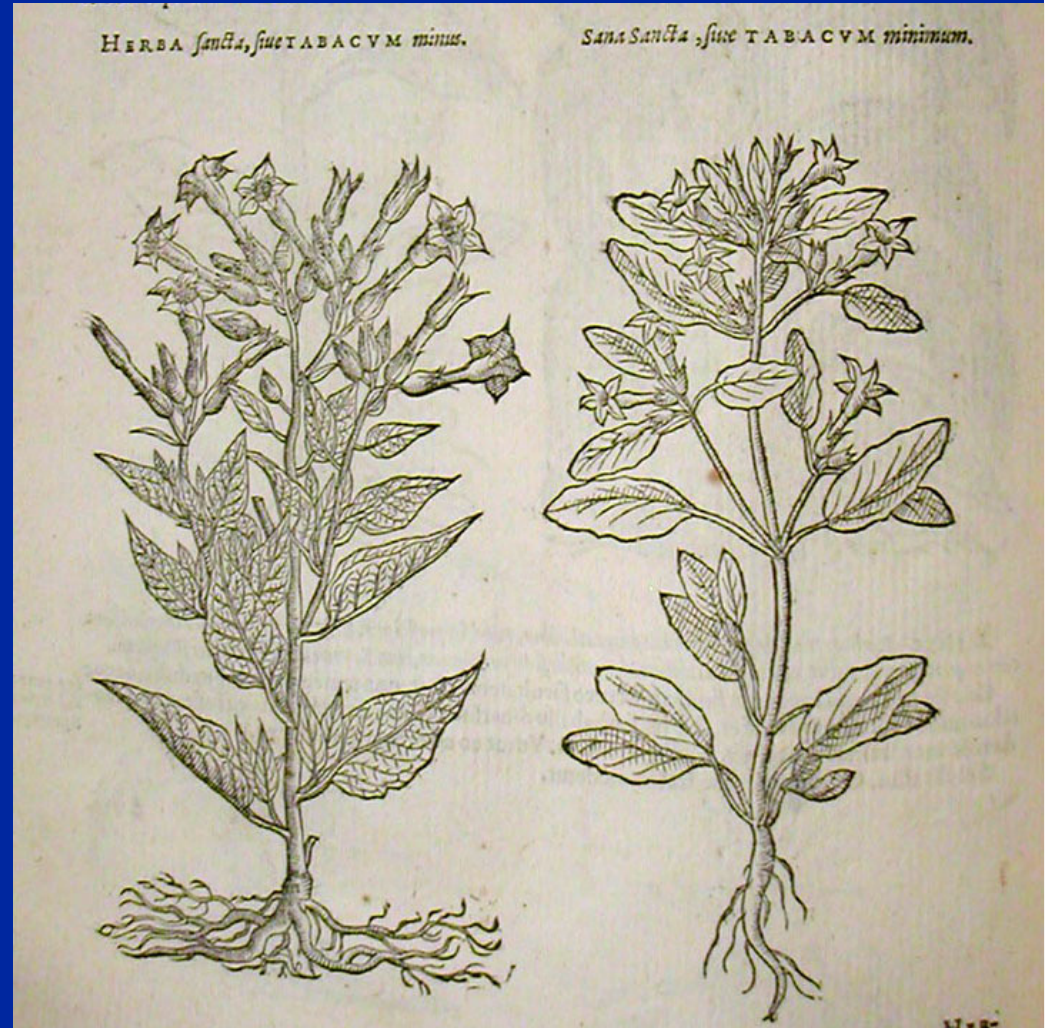
Florentine Codex 1540–1585, Mexico



Fuchs unpubl. 1542–1565



Lobel 1576



Besler 1613



Conclusions

- 1. Iconography and related texts are a rich source of information on genetic diversity, nomenclature, and uses.**
- 2. New World Solanaceae were eagerly acquired and described by Renaissance herbalists, quickly adopted in Southern Europe, and became major crops world wide.**
- 3. A paradox exists in that the harmless species (eggplant, tomato, and potato) were tainted with the malevolent properties of some Old World Solanaceae (mandrake, henbane, and belladonna) whereas tobacco, which poses a world-wide health hazard, was considered a panacea.**

Acknowledgements

Libraries

Missouri Botanical Garden, Saint Louis

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Musée Ceccano & Musée Requien, Avignon

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