

Feast of FUNGI :

a historical mycology exhibition

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A. Early illustrated herbals

The earliest known writings on fungi are from classical authors such as the Greek Theophrastos (c. 300 B.C.), a pupil of Aristotle, and Roman writer Plinius or Pliny (1st century A.D.) who wrote in their books on natural history about agarics, polypores and truffles [plaatjeszwammen, gaatjeszwammen, en truffels]. They wondered about the nature of these strange plants that seemed to be produced by thunder storms during autumn rains. In excavations of Pompeii where Plinius died during the eruption of the volcano Vesuvius a fresco has been found of edible fungi with game fowl. Interest in fungi mainly originated from their effects on humans being either edible or poisonous. During the Middle Ages little knowledge was gained on fungi. The classical authors remained the main starting point for information on fungi also during the first centuries after the introduction of the printing press. Next to bibles and classical works large folio books were published by medical doctors on all known plants for medical treatment. Firstly they were illustrated with primitive woodcuts. Later in the sixteenth century more accurate illustrations were possible by the techniques of engraving and etching. Gradually into these herbals empirical knowledge was added on local species.

Dioscorides was a physician in the Roman army (1st century B.C.) who wrote a manuscript, the *Materia Medica*, on 500 known Mediterranean plants. His work is used elaborately and commented upon in many sixteenth- to eighteenth century herbals. Here we see a group of agarics near a tree stump which is their natural habitat. Also depicted are 2 snakes and a snail because popular belief was that fungi growing 'neere to serpents dens' are poisonous because of the breath of snakes.

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Dioscorides, P. ; Laguna, A. de; Acerca de la materia medicinal, y de los venenos mortiferos
Salamanca : Mathias Gast, **1566.** - 616 p.
FORUM - SPEC.COLL. - R335C06

Mattioli's edition consist of more comments in italic than the original text of Dioscorides in regular font style.

Mattioli, P.A. ; Dioscorides, P.; Opera quae extant omnia: hoc est, commentarij in 6 libros Pedacij Dioscoridis Ana Zarbei de Medica materia
Francofurti [=Frankfurt] : Nicolai Bassaei, **1598.** - 2 dl. in 1 bd.
FORUM - SPEC.COLL. - R334B09
<http://www-gdz.sub.uni-goettingen.de/cgi-bin/digbib.cgi?PPN490594891>

In 1581 the Belgian Lobelius or Matthias de l'Obel published his *Kruydtboeck* by the famous Plantin Press at Antwerp. Before this the few known fungi mentioned in the classical texts and first herbals were scattered at random among plants and minerals. In his work all mushrooms were gathered together as one group and accurately illustrated with clear woodcuts. Fellow Belgian botanist Rembertus Dodonaeus and subsequently all botanists used the same taxonomy and illustrations for their books later.

Dodonaeus, R.; Stirpium historiae pemptades sex sive libri 30
Antverpiae : Christophori Plantini, **1583.** - 859 p.
FORUM - SPEC.COLL. - R343A06

The next important contribution to the study of fungi was done by another Belgian botanist Carolus Clusius who worked for Emperor Maximillian II in Vienna from 1573 until 1584 before he became a professor and curator of the botanical garden in Leiden. During his years in Vienna he collected fungi from

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Pannonia, now parts of Austria, Hungary and Slovenia. 105 new species were described with 33 new illustrations. Unfortunately the original Hungarian water color drawings, later known as the Codex Clusius were mislaid by the publisher and simple woodcuts were made.

Clusius, C. ; Pona, J.; Rariorum plantarum historia ; Fungorum in Pannoniis observatorum brevis historia
Antverpiae [Antwerpen] : Ioannem Moretum, **1601**. - 2 publ. in 1 bd.
FORUM - SPEC.COLL. - R334B06
<http://caliban.mpiz-koeln.mpg.de/~stueber/ecluse/index.html>
&
Portrait of Carolus Clusius

This later herbal based on Dioscorides used the images from the works of Lobelius, Dodonaeus and Clusius, all published at the Plantin-Moretus Press, but the German printer copied them from the original wood cuts to the more refined technique of copper engraving. On copper plates images were made by hand drawing rather than cutting so usually a much higher quality of details could be obtained. Since these engravings are copies of woodcuts they are actually of a lesser quality.

Dioscorides, P. ; Danzius, J. ; Uffenbach, P. ; Braunschweig, H.; Kraeuterbuch dess uralten unnd in aller Welt beruehmtesten Griechischen Scribenten Pedacii Dioscoridis Anazarbaei, von allerley wolriechenden Kraeutern, ...
Franckfurt am Mayn : Johann Bringern ; Conrad Corthoys, **1610**. - 3 dl. in 1 bd.
FORUM - SPEC.COLL. - R336B07

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Another example of the reuse of older images in this largely envised edition of the work of the already deceased Dodonaeus by Joost van Ravelingen.

Dodonaeus, R. ; Cruydt-boeck. [6e dr.] Nu wederom van nieuws oversien ende verb.

T' Antwerpen : in de Plantijnsche Druckerije van Balthasar Moretus, **1644**, [32], 1492+ 58 p.

FORUM - SPEC.COLL. - R333A02

<http://leesmaar.nl/cruydtboeck/index.htm>; <http://plantaardigheden.nl/dodoens/default.htm>

Swedish physician Gaspard or Caspar Bauhin considered fungi to be “nothing but superfluous humidity of soil, trees, rotten wood and other decaying substances’. He developed a first approach to a binominal taxonomy even before Linneaus; also based on the work of Lobelius and Clusius.

Bauhin, C. ; Pinax theatri botanici : sive index in Theophrasti, Dioscordis, Plinii et botanicorum qui a seculo scripserunt

Basilae Helvet [Basel] : Ludovici Regis, **1623**. - 546 p.

FORUM - SPEC.COLL. - R334E16

<http://gallica.bnf.fr/scripts/ConsultationTout.exe?O=n097448>

&

Portrait of Caspar Bauhin

In: Bauhin, C. ; Bauhin, J.C.; Theatri botanici sive historiae plantarum ex veterum et recentiorum placitis propriaq[ue] observatione concinnatae

Basileae [Basel] : Ioannem Koenig, 1658. - [342] p.

FORUM - SPEC.COLL. - R339A04

Francois van Sterbeeck was a Belgian priest who during a chronic illness turned his attention to botany. After publishing a small treatise on mushrooms he took notice of the newly found Codex Clusius. Sterbeeck made considerable use of it in his new book bringing together all known species and knowledge in the first independent monograph on mushrooms. The

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frontispiece depicts the Antwerp Mushroom market where Italian, Spanish and Portuguese merchants, trading at the Stock Exchange, bought most of the supplies. Above the arcade is a small portrait of the author.

Sterbeeck, F. van; *Theatrum fungorum oft het tonneel der campernoelien* : waer in vertoont wort de ghedaente, ken-teeckens, natuere, crachten, voetsel, deught ende ondeught; mitsgaders het voorsichtigh schoonmaken ende bereyden van alderhande fungien. - 2e dr.

Antwerpen : Franciscus HuysSENS, 1712. - 396 p.

FORUM - SPEC.COLL. - R340F05

http://caliban.mpiz-koeln.mpg.de/~stueber/sterbeeck/theatrum_fungorum/sterbeeck_theatrum_fungorum.pdf

&

Sterbeeck, F. van ; Willebrands, M. ; Hoog, A. van 't; *Traktaat van de kampernoeljes*, genaamd duivelsbrood door Franciscus van Sterbeeck (1668) : een paddenstoelentraktaat uit de zeventiende eeuw

Hilversum: Verloren, 2006, 104 p

FORUM - CLOSED STACKS - 540F08

Mycology, the scientific study of fungi, is relatively modern since it had to await the development of the microscope. This book of the Italian botanist Pier Antonio Micheli is nowadays seen as the official start of mycology because he was the first to recognise the structure and reproduction of fungi through spores by microscopic study of fungi.

Micheli, P.A.; *Nova plantarum genera juxta Tournefortii methodum disposita quibus plantae 1900 recensentur, scilicet fere 1900 nondum observatae, ...*

Florentiae : Bernardi Paperinii, 1729. - 234 p.

FORUM - SPEC.COLL. - R334C07

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B. Regional flora

After the seventeenth century herbals went out of fashion. Botany was studied separately from the medical sciences. The vast amount of plants made it necessary to order and name plants properly. These taxonomical works are hardly illustrated and therefore not shown in this exhibition. As the number of known plants rose it became clearer that not all species grew everywhere. Emphasis was also put on the study of plants and fungi of a certain region or country. Some of these works on regional plants from the eighteenth and nineteenth century are famous because of their beautiful hand colored illustrations.

Flora Danica

In 1752 G.C. Oeder was appointed professor of botany by royal decree. at the self-established Royal Botanical Institution. A year later Oeder proposed the publication of a *Flora Danica* with folio-sized pictures of all wild plants in Denmark. The aim was to popularize botany and in that way enhance the knowledge of the useful and harmful characters of the various plants. The first part of the book was published in 1761 (ahead of schedule) and the last 123 years later in 1883. It is considered one of the world's great works of botany, a true product of the Enlightenment era.

Oeder, G.C. ; Mueller, O.F. ; Vahl, M.; *Icones plantarum sponte nascentium in regnis Daniae et Norvegiae, in ducatibus Slesvici et Holsatiae, et in comitatibus Oldenburgi et Delmenhorstiae: ad illustrandum opus de iisdem plantis, regio jussu exarandum, Florae Danicae nomine inscriptum*
Hafniae [=Kopenhagen]: Claudi Philiberti ; Martin Hallager ; N. Moelleri et Filii, **1766-1799.** - 7 bd.
FORUM - SPEC.COLL. - R340A01
<http://www.kb.dk/en/tema/floradanica/index.html>

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Hornemann, J.W. ; Groshans, G.P.F.; Over de Flora Danica
Leiden: [s.n.], 1838, 116 p.
FORUM - SPEC.COLL. - RKr.0270

Flora of France

The present volumes include several species of mushrooms, the plants which Bulliard knew best and to which he dedicated most of his efforts. The Linnean nomenclature of the higher Fungi was, at the beginning, largely his work. Other plants described by him in this volume are the usual poisonous plants of the Mediterranean basin and the Parisian region, as i.a. foxglove and aconitum.

Bulliard, J.B.F.; *Herbier de la France, ou collection complete des plantes indigenes de ce Royaume avec leurs details anatomiques, leurs proprietes, et leurs usages en medecine*
Vol. 1: *Histoire des champignons de la France, ou traite elementaire, renfermant dans un ordre methodique des descriptions et les figures des champignons qui croissent naturellement en France*
A Paris: chez l'auteur, Didot jne, Debure et Belin, **1780-1798.** - 5 vol.
FORUM - SPEC.COLL. - R341G01

Flora Batava

An equivalent to the Flora Danica is the Dutch Flora Batava; an illustrated survey of all indigenous plants in the Netherlands. It too was a mammoth undertaking starting in 1800 of which the last volume was not published until 1934. Jan Kops saw to it that first class illustrations were - 9 - made from nature by skilled botanical illustrators for the engraver. The library has the unique collection of these original drawings for the first 13 volumes of which the first 7 are bound within a beautiful copy opposite the hand colored print. As publication took so long, it became a true monument of nineteenth-century book production, since it is extremely rare for so many

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developments in printing and illustration techniques to be reflected in one single work.

Kops, J. ; Trappen, J.E. van der ; Pavord Smits, H.C. van de ; Vuyck, L.; Flora Batava : of afbeelding en beschrijving van Nederlandsche gewassen

Te Amsterdam [etc.] : by J.C. Sepp en Zoon [etc.], **1800-1934.** - 28 dl. : 2,240 plates

FORUM - SPEC.COLL. - R362 Bot.ill. ; R353C01, dl.7 ; R346B/C01, dl. 10

<http://caliban.mpiz-koeln.mpg.de/~stueber/batava/>

Fungi of Sweden

The *Dictionary of the Fungi* credits Fries with the title "the Linnaeus of Mycology", and this seems a fair title, both in the positive and the negative senses. Like Linnaeus, Fries didn't increase our knowledge of the biology of fungi to a noticeable degree, but he did give an immeasurably better way to organize that knowledge.

Fries, E.; *Icones selectae Hymenomycetum nondum delineatorum : sub auspiciis Regiae academieae scientiarum Holmiensis*

Holmiae et Upsaliae : Norstedt [etc.], **1867-1884.** - 2 vol.

FORUM - SPEC.COLL. - R334A13

A fine example of chromolithograph printing

Konrad, P. ; Maublanc, A. ; Maire, R.; *Icones selectae Fungorum*
Paris: Lechevalier, **1924-1937.** - 6 dl.

FORUM - CLOSED STACKS - 1397B02

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C. Cultivation and cookery

The cultivation of mushrooms was developed in France where Nicolas de Bonnefons wrote about it in 1650/1. His method was translated in the work John Evelyn in 1658. They describe how to grow 'bed-mushrooms' in the garden on manure: '*you must prepare a bed of mules, or asses soyl, ..., you must cast upon it all the parings, and offals of such mushrooms as have been dressed in your kitchen, together with the water wherein they were wassed, ...*'.

Bonnefons, N. de; *Le jardinier Francois, qui enseigne a cultiver les arbres, et herbes potageres; avec la maniere de conserver les fruict, et faire toutes sortes de confitures, conserves, et massepans.* - 8me ed. Paris : Anthoine Cellier, **1666**. - 390 p.
FORUM - SPEC.COLL. - R340G02

Philip Miller gives a detailed description of how to cultivate mushrooms for which a better method was used to get new plants by collecting the earth from mushrooms growing in the wild. It was still an uncertain business, because of the difficulty of obtaining good spawn, but already largely commercial in the eighteenth century.

Miller, P.; *The gardeners dictionary: containing the methods of cultivating and improving the kitchen, fruit and flower garden : as also, the physick garden, wilderness, conservatory, and vineyard, according to the practice of the most experienc'd gardeners of the present age* London: C. Rivington, **1731,1735**. - 2 pt. in 1 vol.
FORUM - SPEC.COLL. - R342C17

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Chomel describes every kind of practice around the household. Apart from mushrooms he also mentions kampernoeljes or devils bread and moucherons.

Chomel, N. ; *Algemeen huishoudelijk-, natuur-, zedekundig- en konstwoordenboek, vervattende veele middelen om zijn goed te vermeerderen, en zijne gezondheid te behouden* -2e dr. / verbeterd en vermed. door J.A. de Chalmot
Leyden ; Leeuwarden: Joh. le Mair ; J.A. de Chalmot, **1778**. - 7 dl.
FORUM - SPEC.COLL. - RAA0141

By the mid-nineteenth century a large industry was set up, particularly in France, in disused underground limestone quarries. It was not until the end the nineteenth century that pure culture techniques became available for mushroom growing. Henceforth specialized monographs on mushroom cultivation appeared.

Cutthill, J.; *A treatise on the cultivation of the mushroom.* -3rd ed
London: Groombridge, [ca. **1870**]. - 23 p.
FORUM - SPEC.COLL. - C1497
&
Lebl, M.; *Die Champignonszucht.* - 3. Aufl.
Berlin: Parey, **1889**. - 74 p
FORUM - SPEC.COLL. - ZZ0284

Nursery catalogues rarely contain mushrooms since it was a specialized trade.

Serie kwekerscatalogi van C. G. Van Tubergen te Lisse
Lisse: C. G. Van Tubergen, **1895**
FORUM - SPEC.COLL. - BOX E00354 - AANWEZIG 1895-2004
&
Serie kwekerscatalogi van Groenewegen & Co. te Amsterdam
Amsterdam: Groenewegen & Co., **1880, 1904**
FORUM - SPEC.COLL. - BOX E00124 - AANWEZIG 1850-1917

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Series of nursery catalogues of Vilmorin Andrieux at Paris

Paris: Vilmorin Andrieux, **1876-1877**

FORUM - SPEC.COLL. - BOX A00314 - AANWEZIG 1847-1988

Wall charts were used from the end of the nineteenth century for educational purposes on crop plants at agricultural schools and on nature conservation.

Jung, Koch & Quentell; *Psalliota campestris*

Düsseldorf : Lehrmittelverlag Hagemann, **1963**. – Wall chart

FORUM - SPEC.COLL. - Academ. wandplaat WUR_132

&

Nijkamp, J.A.; *Laat ons staan*

Amsterdam: Instituut voor Natuurbeschermingseducatie, [ca. **1966**], 2

pl. - Poster

FORUM - SPEC.COLL. - RKk.III,Diversen ; FORUM - CLOSED STACKS -

BrNZ09 (Toel.)

&

Thijssse, J.P.; *Paddenstoelen*

Zaandam: Verkade, 1929, 81 p.

FORUM - SPEC.COLL. - Q1676

Cookery: the culinary uses of mushrooms and other fungi

Earlier botanical literature mentioned only shortly how to prepare edible fungi by cooking or frying them. More elaborate recipes are now given in treatises for landlords on how to live comfortably on the produce of the land.

Bonnefons, N. de; *Les delices de la campagne, suite du Jardinier francois : ou est enseigne a preparer pour l'usage de la vie, tout se qui croist sur la terre, et dans les eaux.* - Dern. ed. / augm. par l'autheur

A Paris : chez Charles de Sercy, **1679**. - [14], 307 p.

FORUM - SPEC.COLL. - R340G03-03

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The kitchen maid in the Dutch province of Gelderland had her own books on cooking based on the economic principle of being thrifty.

De nieuwe zuinige Geldersche keukenmeid. - 2e dr.

Nijkerk: [s.n.], **1838**. - 232 p.

FORUM - SPEC.COLL. - RE0801

&

De volmaakte Geldersche keuken-meyd, onderwyzende hoe men allerhande spyzen op een smakelyke en min kostbare wyze kan toerigten; - 2den dr.,

Te Nymegen: by Isaac van Campen, **1761**. - [8], 432, [32], 82, [4] p.

FORUM - SPEC.COLL. - R337F07-3

Twentieth century cooking books

Cool, C.; Hoe maken we de paddenstoelen klaar : eenvoudige handleiding tot het toebereiden van paddenstoelen

Amsterdam: Versluys, **1919**. - 26 p.

FORUM - CLOSED STACKS - VS19074

Simon, A.L.; Mushrooms galore : a book of mushroom recipes

London: Newman Neame, **1951**. - 54 p.

FORUM - CLOSED STACKS - 909D45

Dunleavy, B.; Cooking with mushrooms

Sydney: Hamlyn, **1978**. - 112 p.

FORUM - CLOSED STACKS - 909A06

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The truffle hunting was and still is a popular activity in parts of France and Italy which was widely promoted by touristic postcards. It used to be done with pigs but they too are fond of eating truffles. Nowadays trained dogs are mainly used since they don't eat them themselves.

Cate, C. L. ten; De truffels en het varken : een collectie plaatjes [en prentbriefkaarten].
[S.l. : s.n.], **1968**. - 12 p.
FORUM - SPEC.COLL. - R361 Ms. (322H59)

Some mushrooms are used for a different kind of consumption.

Riedlinger, T. J. ;Wasson, R. G.; The sacred mushroom seeker : essays for R. Gordon Wasson.
Portland : Dioscorides Press, **1990**. - 238 p.
FORUM - CLOSED STACKS - 528F35

&

Letcher, A.; Shroom : a cultural history of the magic mushroom.
London : Faber and Faber, **2006**. - XIV, 360 p.
FORUM - BOOKS - 501-E/2006-05

&

Ven, D.J. van der ; Bruining-Bijl, M.; Het wondere leven der paddenstoelen
Amsterdam: Meulenhoff, 1915, 284 p.
FORUM - SPEC.COLL. - Q1360

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Bronnen:

Ainsworth, G.C.; Introduction to the history of mycology
Cambridge [etc.]: Cambridge University Press, 1976, 359 p. ISBN
0521210135
FORUM - CLOSED STACKS - 468F03 ; 1279D06

Willebrands, M. ; Hoog, A. van 't; Traktaat van de kampernoeljes,
genaamd duivelsbrood door Franciscus van Sterbeeck (1668) : een
paddenstoelentraktaat uit de zeventiende eeuw
Hilversum: Verloren, 2006, 104 p - ISBN 9065509178
FORUM - CLOSED STACKS - 540F08

Websites:

Farlow Library of Cryptogamic Botany exhibit on mycological Illustration
<http://www.huh.harvard.edu/libraries/mycology/illustration.htm>

Database of historical biographies of mycologists on the website of the
Illinois Mycological Association:
<http://www.ilmyco.gen.chicago.il.us/index.html>

Hundred Highlights of the Dutch Royal Library on the Flora Batava:
<http://www.kb.nl/galerie/100hoogtepunten/070-en.html>
