

Porcini Mushrooms Through the Ages

BOLETUS EDULIS (a.k.a. porcini, cèpe, etc.) and its relatives are one of the most highly prized edible mushrooms in the world. These mushrooms are found in most temperate forests of the Northern Hemisphere in a symbiotic relationship with certain trees known as mycorrhizae.

IN WESTERN SOCIETIES, the ancient Greeks and Romans were the first to hold *Boletus edulis* in high value as a culinary delicacy. The name "boletus" means "clod of earth," indicating that these civilizations perceived mushrooms as fructifications of the earth.

2006

Blakemore, Matt











A Treatise on the Esculent Fungeses of England...

Badham, David

TODAY, there are over 25 species of Boletus edulis and its relatives. A great deal of confusion exists regarding the identification of contemporary collections using comparisons with traditional representations.

Our modern methods have supplemented paintings and photographs with cytological details, biochemistry, and DNA sequences, and these tools are presently being used to make sense out of this historically rich and economically important group of mushrooms.

1847

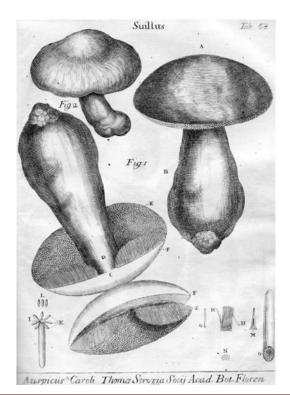
Badham, David











Nova Plantarum Genera

Micheli, Pier Antonio

One of the earliest surviving depictions of Boletus edulis is found in Micheli's Nova Plantarum Genera where he accurately identified cells of the reproductive layer (basidia and cystidia) of mushrooms for the first time.

At the time, Boletus edulis was not formally described with a Linnaean binomial, but was referred to as Suillus, the term used by the Ancient Greeks. Micheli is often referred to as the "Father of Mycology" as a result of this seminal work.

1729

Micheli, Pier Antonio













Histoire des Champignons de la France Buillard, Jean Baptiste Francois

Jean Baptiste François Bulliard (a.k.a. Pierre Bulliard) studied the natural history of France and compiled volumes of paintings and descriptions of animals, plants, and fungi in the 18th century.

His paintings are notable for their detailed and accurate depictions, yet maintain an artistic quality through his use of shadow and representation of texture. These plates were originally carved as woodcuts and reproduced without color. Hired artists would later fill in the colors, making each copy unique.

1791

Buillard, Jean Baptiste Francois









 B. edulis, pileo pulvinato glabro, tubulis semiliberis subrotundis minutis albis mex flavis, stipite crasso reticulato.

Suillus esculentus. Caralp. p. 617. Vaill. par. p. 69.
n. 4. Mich gen. t. 68. f. 1. Buxb. C. V. t. 12. Batt.
t. 50. d. B. mativus. Slotterb. Act. helv. 4. p. 54.
t. 5. f. 2. Hall. helv. n. 2502. B. bulboust. Schaff.
t. 134. 135. B. edulis. Bull. Ch. p. 522. t. 60, 494.
Schrod. spic. p. 149. Pers. syn. p. 510. Sowerb. t.
111. So. Bot. t. 197. Swarts 1. e. p. 4. B. esculent.
Pers. Obs. 1. p. 25. B. crassipes. Schum, p. 578.

Stipes compactus, carnosus; nunc brevis ovato-bulbosus, nunc 4-5 unc. longus, subaqualis, pallide fascescens. Pileus amplus, hemisphæricus,
dein dilatatus, fere nitens, mollis, variat vaccinus,
badins, fuligineus, albidus; etiam "margine coccineo" (B. tuberosus Pers. l. c.), jove sicco diffractus (B. reticulatus Schaff.) Caro alba, immutabilis l. rufescens, sapore grato. Tubuli longi, primo
farcti albi, dein iutei convex), ebtusi; demum virent, ore rubro. (Fl. Dan. t. 1256!) Sporidia sordide ochracea, subvirentia, in charta alba fere nigricant, (an hine n. 13-16 Pratella dicende?) Species in cibariis laudatissima. Cf. O. F. Maller Rörsvamp, Hafn. 1705. Tratt. Esb. Schw. p. 104 Pers.
Ch. Comest. Sc., In silvis ubique, etiam America. Acst,
dut. (v. v.)

Systema Mycologicum

Fries, Elias Magnus

In 1821, Elias Fries treated Boletus edulis in his Systema Mycologicum, the first comprehensive treatment on the classification of mushrooms. Fries identified Bulliard's woodcut print in Histoire des Champignons de la France (1791) as the best representation of the species available in print, but did not designate any specimens in an herbarium that could be used as a reference.

More recently, the International Code of Botanical Nomenclature has established the authority of Fries' name for this enigmatic

1821

Fries, Elias Magnus











LIBRARIES

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Systema Mycologicum

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More recently, the International Code of Botanical Nomenclature has established the authority of Fries' name for this enigmatic mushroom. In the absence of a designated museum specimen, Bulliard's painting

1821

Fries, Elias Magnus











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LIBRARIES



Memoirs of the New York State Museum 4 Peck, Charles Horton

At the turn of the 20th century in North America, C. H. Peck described many new species of mushrooms including seven new relatives of Boletus edulis, more than twice the number of known species in Europe.

In addition to representing mushrooms with watercolor paintings, Peck supplemented his descriptions with specimens that were preserved and maintained at the New York State Museum herbarium. Today, Peck's herbarium remains one of the most important collections of North American mushrooms.

1900

Peck, Charles Horton













The Boleti of Northeastern North America

Snell, Walter Henry & Dick, Esther Amelia

During the middle of the 20th century, the study of mycology benefited from the use of improved technologies such as more refined microscopes. Snell began publishing on boletes in 1932, and eventually described two new species of porcini, the first additions to the group since C. H. Peck.

Walter Snell's career culminated with the publication of his influential Boleti of Northeastern North America, which continues to be an important reference for the identification of boletes.

1970

Snell, Walter Henry & Dick, Esther Amelia













Farbatlas der Basidiomyceten Colour Atlas of Basidiomycetes

Moser, Meinhard

Modern treatments of mushrooms emphasize color photographs with a neutral background and scale bar. This standardized method ensures consistency and allows for more accurate comparisons between different species.

The Colour Atlas of Basidiomycetes is one the most exhaustive treatments of European mushrooms ever undertaken, and after eleven years is still a work in progress.

1980 +

Moser, Meinhard









Text Credits

BRYN DENTINGER is a fifth year Ph.D. student in the Department of Plant Biology. He is participating in a collaborative project called Assembling the Fungal Tree of Life, and is studying the evolution of coral fungi and the systematics and biogeography of Boletus edulis and its relatives with Dr. David McLaughlin.

MAJ PADAMSEE is a fourth year Ph.D. student in the Department of Plant Biology. She is participating in a collaborative project called Assembling the Fungal Tree of Life, and is studying the systematics of the mushroom genus Psathyrella with Dr. David McLaughlin.

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