



FUNGI FACTS compiled by D. Smullen, 2019

- Unicellular and multicellular organisms with cell walls made of chitin...acquire food by absorption. 80% of species still undescribed.
- Saprotrophic fungi are essential decomposers... recycling nutrients into the ecosystem.
- Over 80% of all plants benefit by fungal hyphae in and on their roots – mutualistic mycorrhizae... Allow forest trees to communicate.
- Yeasts allow production of bread, wine, beer....other fungi flavor cheeses.
- Food for humans and other animals – rich in vitamins and minerals.
- Used as medicine (penicillin) and tonics for ages. Assist immune system.
- Cause of human diseases – ringworm, athlete's foot, Valley fever. Serious diseases of frogs and bats.
- A few contain compounds so toxic...will cause death.
- Some fungi act as bio-controls for insects and nematodes.
- Threats to produce... bananas, coffee, wheat and more.
- Some fungi historically used as fire starters.
- One fungus, *Armillaria ostoyae*, is the largest living organism on earth – covers 4 square miles or 2,000 acres.
- Many fungi used in bioremediation of hazardous materials.
- True truffles of Europe and Tibetan caterpillar fungi are worth more than precious metals.
- Fungi are used to produce citric acid used in beverages.
- Help for honey bees endangered by mites and viruses.
- Fungi are used in fake leather products and as packaging material.
- Fungus found that degrades polyurethane.
- A few fungi create "zombie" ants.
- Clouds in rain forests may form on fungal spores.
- One fungus in Patagonia can produce diesel fuel.
- 350 million years ago, before there were vertebrates on land, the largest land organism was a fungus or lichen – 20 feet tall and 3 feet wide – *Prototaxites*.
- Some fungi are bioluminescent.

