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# **Mushroom Data Set**

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**Abstract**: From Audobon Society Field Guide; mushrooms described in terms of physical characteristics; classification: poisonous or edible



Data Set Characteristics:	Multivariate	Number of Instances:	8124	Area:	Life
Attribute Characteristics:	Categorical	Number of Attributes:	22	Date Donated	1987-04-27
Associated Tasks:	Classification	Missing Values?	Yes	Number of Web Hits:	238994

### Source:

Origin:

Mushroom records drawn from The Audubon Society Field Guide to North American Mushrooms (1981). G. H. Lincoff (Pres.), New York: Alfred A. Knopf

Donor:

Jeff Schlimmer (Jeffrey.Schlimmer '@' a.gp.cs.cmu.edu)

## **Data Set Information:**

This data set includes descriptions of hypothetical samples corresponding to 23 species of gilled mushrooms in the Agaricus and Lepiota Family (pp. 500-525). Each species is identified as definitely edible, definitely

poisonous, or of unknown edibility and not recommended. This latter class was combined with the poisonous one. The Guide clearly states that there is no simple rule for determining the edibility of a mushroom; no rule like ``leaflets three, let it be' for Poisonous Oak and Ivy.

#### **Attribute Information:**

- 1. cap-shape: bell=b,conical=c,convex=x,flat=f, knobbed=k,sunken=s
- 2. cap-surface: fibrous=f,grooves=g,scaly=y,smooth=s
- 3. cap-color: brown=n,buff=b,cinnamon=c,gray=g,green=r, pink=p,purple=u,red=e,white=w,yellow=y
- 4. bruises?: bruises=t,no=f
- 5. odor: almond=a,anise=l,creosote=c,fishy=y,foul=f, musty=m,none=n,pungent=p,spicy=s
- 6. gill-attachment: attached=a,descending=d,free=f,notched=n
- 7. gill-spacing: close=c,crowded=w,distant=d
- 8. gill-size: broad=b,narrow=n
- 9. gill-color: black=k,brown=n,buff=b,chocolate=h,gray=g, green=r,orange=o,pink=p,purple=u,red=e, white=w,yellow=y
- 10. stalk-shape: enlarging=e,tapering=t
- 11. stalk-root: bulbous=b,club=c,cup=u,equal=e, rhizomorphs=z,rooted=r,missing=?
- 12. stalk-surface-above-ring: fibrous=f,scaly=y,silky=k,smooth=s
- 13. stalk-surface-below-ring: fibrous=f,scaly=y,silky=k,smooth=s
- 14. stalk-color-above-ring: brown=n,buff=b,cinnamon=c,gray=g,orange=o, pink=p,red=e,white=w,yellow=y
- 15. stalk-color-below-ring: brown=n,buff=b,cinnamon=c,gray=g,orange=o, pink=p,red=e,white=w,yellow=y
- 16. veil-type: partial=p,universal=u
- 17. veil-color: brown=n,orange=o,white=w,yellow=y
- 18. ring-number: none=n,one=o,two=t
- 19. ring-type: cobwebby=c,evanescent=e,flaring=f,large=l, none=n,pendant=p,sheathing=s,zone=z
- 20. spore-print-color: black=k,brown=n,buff=b,chocolate=h,green=r, orange=o,purple=u,white=w,yellow=y
- 21. population: abundant=a,clustered=c,numerous=n, scattered=s,several=v,solitary=y
- 22. habitat: grasses=g,leaves=l,meadows=m,paths=p, urban=u,waste=w,woods=d

## **Relevant Papers:**

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<u>Data Transformation For Privacy-Preserving Data Mining Degree: Doctor of Philosophy Year this Degree</u>
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