

KEY TO THE COMMONER LICHENS ON JASPER RIDGE

compiled by Janet Doell

This key is designed to be used in conjunction with the handout An Introduction to the Lichens of Jasper Ridge. This is an informal key and applies only to lichens likely to be seen on the main trails of Jasper Ridge. It won't be very useful in other parts of the Bay Area. I would appreciate hearing whether it works or not, what are the problems with it etc..

CRUSTOSE LICHENS

It is impossible to work with crustose lichens with any accuracy without a compound microscope to study such features as spore size and shape. A few crustose lichens on Jasper Ridge, however, can be recognized by a few distinctive characteristics.

KEY

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| 1. Thallus orange | 2 | |
| 1. Thallus blue green, grey, or white | 3 | |
| 2. On rocks, rarely on bark at base of trees. Thallus small, sometimes invisible except for the orange apothecia; turns red with KOH | | <u>Caloplaca</u> |
| 2. On rocks and trees, usually a less defined thallus than most <u>Caloplacas</u> , also a more yellowish orange; sometimes yellow; does not turn red with KOH | | <u>Candelaria</u> |
| 3. Thallus blue-green, consists of granules (hand lens), somewhat powdery looking; found in shaded areas on trees and rocks | | <u>Lepraria</u> |
| 3. Thallus grey or white | 4 | |
| 4. Thallus grey, on trees | 5 | |
| 4. Thallus white | 6 | |
| 5. With flesh colored apothecia | | <u>Ochrolechia</u> |
| 5. With white soralia (look like white dots) | | <u>Pertusaria</u> |
| 6. On railing of old bridge at head of lake. Black (spores) comes off on fingers when fruiting bodies are rubbed (these are mazaedia as opposed to apothecia) | | <u>Cyphelium</u> |

FRUTICOSE LICHENS

All the lichens in this key are pale grey green.

KEY

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| 1. Pendulous thallus | 2 |
| 1. Thallus erect | 3 |
| 2. Thallus branched and stringy with strong white cord
down the center | <u>Usnea</u> sp. |
| 2. Thallus <u>netted</u> and flat | <u>Ramalina menziesii</u> |
| 3. Thallus short and bushy with strong white cord
down the center of it | <u>Usnea</u> sp. |
| 3. Thallus flat or inflated | 4 |
| 4. Thallus flat | 5 |
| 4. Thallus inflated and hollow. Found in chaparral | <u>Hypogymnia</u> |
| 5. Thallus grey green on both sides | <u>Ramalina</u> |
| 5. Thallus with narrow lobes becoming divided toward
tip. White on one side | <u>Evernia</u> |

FOLIOSE LICHENS

KEY

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| 1. Yellowish green | 2 | |
| 1. Bluish grey, white, brown, black or orange | 3 | |
| 2. With white spots and cracks on upper surface
(use hand lens); on trees | | <u>Parmelia flaventior</u> |
| 2. On rocks; large, loosely attached | | <u>Xanthoparmelia</u> |
| 3. Bluish grey | 4 | |
| 3. White, brown, black or orange | 6 | |
| 4. Thallus large, lobes 5-10 mm across | 5 | |
| 4. Thallus divided into small fine linear lobes,
covered with network of pale ridges | | <u>Parmelia sulcata</u> |
| 5. Black cilia or hairs visible along margins
(hand lens) | | <u>Parmotrema arnoldii</u> |
| 5. No black cilia or hairs visible along margins | | <u>Platismatia glauca</u> |
| 6. Thallus white, small, somewhat firmly attached
to bark; lobes less than 3 mm; white reverse | | <u>Physcia</u> |
| 6. Thallus brown, black or orange | 7 | |
| 7. Thallus brown | 8 | |
| 7. Thallus black or orange | 12 | |
| 8. Light brown, finely divided, looks a lot like
<u>Physcia</u> ; thallus may have white edge; common on
oak bark | | <u>Physconia</u> |
| 8. Dark brown | 9 | |
| 9. On rocks; to 1½ cm in diameter; attached at one
central point | | <u>Umbilicaria</u> |
| 9. On trees or soil | 10 | |
| 10. On soil; greyish brown, turns green when wet;
reddish brown apothecia up on raised fingers
of thallus ; on cutbanks in damp shady areas | | <u>Peltigera</u> |
| 11. Thallus ridged, apothecia reddish brown where
present; pseudocyphellae on reverse | | <u>Pseudocyphellaria</u> |
| 11. Thallus smooth; reverse with true cyphellae;
lobes to one cm. wide | | <u>Sticta</u> |
| 12. Thallus black | 13 | |
| 12. Thallus orange, small and delicate; red in KOH | | <u>Xanthoria</u> |
| 13. Thallus black, small and wrinkled; common on oak | | <u>Collema</u> |
| 13. Thallus flat and smooth, very tomentose on reverse | | <u>Leptogium</u> |

SQUAMULOSE LICHENS

The only squamulose lichen I have found at Jasper Ridge is Cladonia. It is recognized by the small leaf-like squamules which grow at the base, disappearing with age in some species. From these grow podetia, hollow stalks which bear the apothecia in the fertile species.

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| 1. Podetia with a goblet shape; small and green or grey | <u>C. chlorophaea</u> |
| 1. Podetia green and branched | <u>C. furcata</u> |