Rooting out *Phaeocollybia*

**LESSONS LEARNED -- A SECOND CHANCE!**

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An enigma uncommon genus — large enough to mesmerize, small enough to master

Phaeocollybia* of NW North America


Ecology & distribution
Morphology
Biology
Development
Taxonomy 1 via morphospecies
Systematics 2 (RFLPs, NT-SYS, Phylip)
Phylogenetics (ITS sequence analyses)
Bar coding

*An enigmatic uncommon genus — large enough to mesmerize, small enough to master
KNOW THY BEAST

The whole genus
monographs, papers,
mycobiotas, reports

The Excel ‘exegesis’
one cell = one character state?
‘diagnostic’ character or developmental variation?

Hard drive ≠ brain?
zenning vs. multivariate analyses
Collect!
Borrow!
Beseech!

*We’re talking thousands here

Examine!

^RFLPs

SEQUENCES —> and now BAR CODES!
DNA contamination in old types

1995: *P. rufotubulina* ≠ *P. californica* = *P. scatesiae*
2012: *P. rufotubulina* = *P. californica* ≠ *P. scatesiae*

PLUS

A ‘sea of sensus’ .... wrong holotype designation ... hybrids ... missing pseudorhizas ... black gels ... Phylip & NT-SYS ... moronic book vault managers ... no money! ... **NO TIME!!!**
OREGON–WASHINGTON RECIPROCITY GRANT
STUNTZ FOUNDATION FELLOWSHIP
NORVELL HOUSEHOLD BUDGET (repeat ad nauseum)
THE 1992 BARRON-REDHEAD RAINFOREST EXPEDITION
AMMIRATI BAIL-OUTS
MSA GRADUATE FELLOWSHIP
NORTHWEST FOREST PLAN (USDA-FS & USDI BLM)
BLM COST-SHARES AND OUR MAN IN SALEM
THE 2000 ROY HALLING TALAMANCAN OAK EXPEDITION
OREGON NATURAL HERITAGE PROGRAM
Peers, colleagues, gurus, friends, ‘citizen scientists,’ professors, undergrads, grads, hunters, students, Bill Clinton, postdocs, us government agencies, botanists, grade-schoolers, gene jockeys, photographers, herbarium curators, technicians, co-authors, forayers, surveyors, field trippers, phylogeneticists, librarians, and more ....
NEW! *Phaeocollybia* of Pacific Northwest North America

A new mushroom identification guide by Lorelei Norvell and Ron Exeter was released in June 2009. The publication offers full-color photos, line drawings, and descriptions of the 25 *Phaeocollybia* species of Oregon, Washington, Idaho, California, and British Columbia. The 228-page book covers the ecology and biology in depth and provides identification keys and over 500 color photos showing these elusive mushrooms in the field, on the lab bench, and under the microscope.

To purchase *Phaeocollybia* of Pacific Northwest North America from the Bureau of Land Management or for additional information, please contact Ron Exeter by e-mail (<Ronald_Exeter@blm.gov>), include “Phaeocollybia book” in the subject line), phone (503-315-5963), or snail mail (c/o USDI-BLM Salem District Office, 1717 Fabry SE, Salem OR 97231).

9 scientific papers + 5 popular articles + ~25 government reports
+ 1 391-p. dissertation + 1 228-p. regional monograph + the *SECOND CHANCE!*
Announcing the \textbf{Phaeocollybia} website for \textit{P. radicata}!!!

\textit{oops...}