Description of Additional Supplementary Files

Supplementary Data 1. Quantitative results of labeled metabolites isolated from symbiotic *S. pistillata*

Supplementary Data 2. Quantitative results of labeled metabolites isolated from symbiotic *E. diaphana*

Supplementary Data 3. Quantitative results of labeled metabolites isolated from symbiotic *C. andromeda*

Supplementary Data 4. Quantitative results of labeled metabolites isolated from aposymbiotic *E. diaphana*

Supplementary Data 5. the relative abundance of isotope-labeled metabolites (13C14N, 12C15N, and 13C15N) normalized to their natural non-labeled forms (12C14N)