

Online Supplement to

**Microbiotic crusts on soil, rock and plants: neglected major players
in the global cycles of carbon and nitrogen?**

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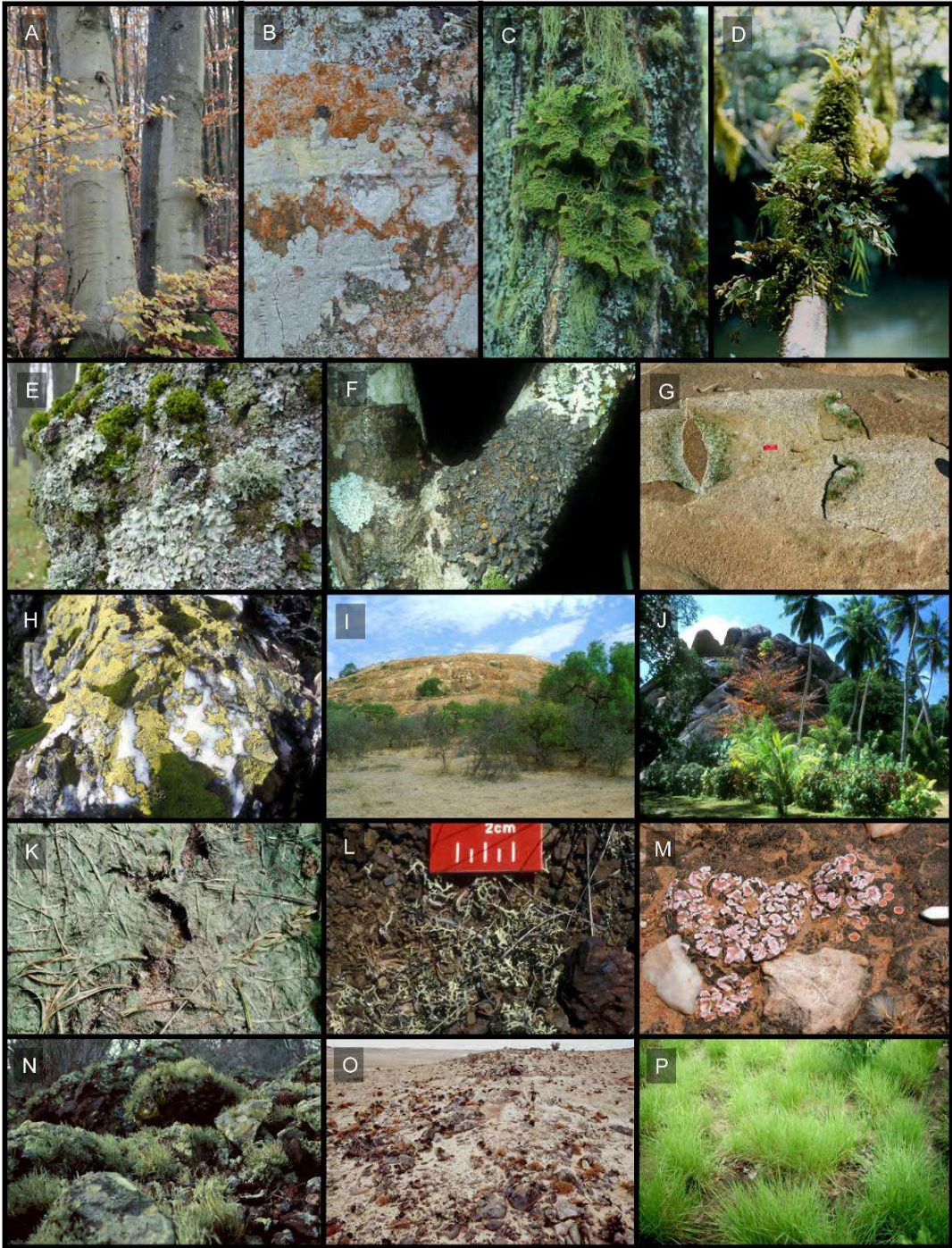


Figure S1: Exemplary photographs of microbiotic crusts.

A: Green algal (*Apatococcus* sp./*Desmococcus* sp.) biofilm on *Fagus sylvatica* tree, Spessartmidlands, Germany

B: Green algal (*Trentepohlia* sp.) and lichen biofilm on Palm tree, Bali, Indonesia

C: Chlorolichens *Lobaria pulmonaria* and *Usnea* sp. on tree, Western Siberia, Russia

D: Chlorolichen *Pseudocyphellaria* sp. on *Nothofagus menziesii* tree, Urewera National Park, New Zealand

E: Lichen and bryophyte cover on *Acer pseudoplatanus* trees in a city park (Trier, Germany)

F: Cyanolichen *Physma byrsaeum*, rainforest tree, NE-Queensland, Australia

G: Endolithic cyanobacteria (dominantly *Chroococciopsis* sp.) in granite rocks, Mt. Falconer, Taylor Valley, McMurdo Dry Valleys, Antarctica

H: Chlorolichen (*Rhizocarpon geographicum* aggr.) crust, Sadnig, Eastern Alps, Austria

I: Cyanolichen crust cover, creating brown inselberg surfaces in arid climates, Limpopo Province, South Africa

J: Cyanobacterial biofilms resulting in black inselberg surfaces in humid climates, La Digue, Seychelles

K: Green algal soil crust, dominated by the filamentous alga *Zygonium ericetorum*, beech forest, Spessart midlands, Germany

L: Soil crust in the steppe region of central Asia with the vagrant chlorolichen *Parmelia* sp., Kuraisk steppe, Western Siberia, Russia

M: Soil crust with cyanobacteria and chlorolichen *Psora decipiens*, Nama Karoo semi desert, Northern Cape, South Africa

N: Lichen fields of the Sonoran Desert, chlorolichens *Niebla* spp., Baja California, Mexico

O: Lichen fields of the Namib Desert, dominated by chlorolichens, Wlotzkasbaken, Namibia

P: Cyanobacterial soil crusts (dominated by *Schizothrix* sp.), *Trachypogon*-grass savanna, upper Orinoco, Venezuela