

Lichens of El Yunque National Forest

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Photos: Robert Lücking [R.Luecking@bo.berlin] and Joel A. Mercado-Díaz [joel_pr19@hotmail.com] and María del Mar Conde Álvarez. Produced by the authors with support from the National Science Foundation, Andrew Mellon Foundation, Ellen Hyndman fund.



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El Yunque National Forest

El Yunque National Forest lies within the municipalities of Naguabo, Ceiba, Fajardo, Luquillo, Río Grande, Canóvanas, and Las Piedras. It has representation of different ecosystems, including moist, wet, lower-wet tropical forests, and even high elevation wetlands. El Yunque is among the most biodiverse forests in the archipelago and the only tropical rainforest in the US National Forest system. This National Forest is unique among the forested areas of the island because it has a dynamic climate characterized by having the highest levels of precipitation in Puerto Rico. Ecological processes in this forest are also supported by the well-aerated soils made from volcanic rocks. Finally, there are many species that are unique to this forest, including *Hygrocybe miniatoforma* (fungus), *Setophaga angelae* (bird) and *Gaetis nigrolineata* (snail). Studies indicate that ecosystems within the El Yunque National Forest harbor the highest lichen diversity in Puerto Rico. Some common lichen genera present in this forest are *Ocellularia*, *Chapsa*, *Sticta* and *Thelotrema*. El Yunque National Forest in Puerto Rico is a unique and invaluable natural treasure due to its remarkable combination of native species, climate patterns, and geological features.



2

Chapsa thallotrema



3

Cladia aggregata



4

Cladonia subradiata



5

Coenogonium cf. *linkii*



6

Cora yukiboa



7

Dibaeis absoluta



8

Dichosporidium nigrocinctum



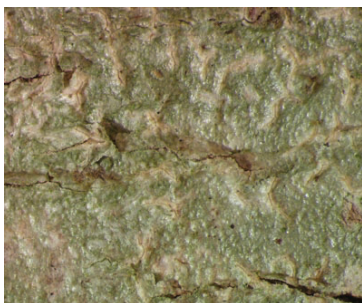
9

Dictyonema cf. *thelephora*



10

Fissurina aurantiacostellata



11

Fissurina crystallifera



12

Graphis argentata



13

Graphis nanodes

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14 *Herpothallon rubrocinctum*



15 *Leptogium azureum*



16 *Leucodermia* sp.



17 *Ocellularia rhodostroma*



18 *Ocellularia submordenii*



19 *Peltigera borinquensis*



20 *Phyllobaeis erythrella*



21 *Pseudopyrenula subgregaria*



22 *Pyrenula cinerea*



23 *Stereocaulon ramulosum*



24 *Sticta aff ciliata*



25 *Sticta borinquensis*



26 *Sticta borinquensis*



27 *Sticta densiphyllidiata*



28 *Sticta harrisii*



29 *Sticta harrisii*



30 *Sticta scabrosa*



31 *Thalloloma rubromarginatum*



32 *Thelotrema porinoides*



33 *Usnea* sp.