

## Research Note

### REDISCOVERY OF NODULATION IN ORMOSIA AND NEORUDOLPHIA, TWO NATIVE LEGUMES OF PUERTO RICO<sup>1,2</sup>

As part of a comprehensive survey of the nodulation status of Puerto Rican legumes and to confirm Edmisten's report<sup>3</sup>, we sampled *Ormosia krugii* Urban and *Neorudolphia volubilis* (Willd.) Britton for nodulation. Several *Ormosia krugii* trees located in the Toro Negro and Guilarte public forests were found nodulated. Samples (herbarium no. 73) were brought to the Soil Microbiology Laboratory of the Department of Agronomy and Soils of the University of Puerto Rico, but the endophyte was a very slow growing *Rhizobium* with colonies produced only after 14 days. Plants of the endemic species *Neorudolphia volubilis* (herbarium no. 107) were found in the Guilarte public forest. Colonies with typical *Rhizobium* characteristics were produced on yeast extract mannitol agar with congo red<sup>4</sup>. The bacteria proved to be *Rhizobium* by nodulation tests with *Macroptilium atropurpureum* cv. siratro grown in tubes. Bacteria were typically slowgrowers and should be classified as *Rhizobium* spp. belonging to the cowpea cross-inoculation group and are available upon request.

Both species should be added to the list of known nodulating species of *Leguminosae*.<sup>5</sup> Future taxonomic studies of legumes should include observation of the presence or absence of nodules. This characteristic has taxonomic value and will provide information regarding the potential role of the plants to grow in poor soils and contribute nitrogen to the ecosystem.

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<sup>3</sup> Edmisten, J., 1970. Survey of Mycorrhiza and Nodules in the El Verde Forest. In: A Tropical Rain Forest. Odum, H. T. and Pigeon, R. F. (Eds). Office of Information Services, U.S. Atomic Energy Commission. F15-F20.

<sup>4</sup> Vincent, J. M., 1970. A Manual for the Practical Study of the Root-Nodule Bacteria. IBP Handbook No. 15, Blackwell Scientific Publications, Oxford.

<sup>5</sup> Allen, O. N. and Allen, E. K., 1981. The Leguminosae. The University of Wisconsin Press, Madison, Wisconsin.