PHYSICAL AND CHEMICAL CHARACTERISATION OF SOILS IN THE NATURAL HABITAT OF *IRVINGIA GABONENSIS* (AUBRY LECOMTE EX O′RORKE) IN THE HUMID FOREST ZONE OF CAMEROON

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Eighty soil samples, 40 from the topsoil (0-20cm) and 40 samples from the subsoil (20-40cm) were collected under 40 trees in 3 sites and 4 land use systems in the natural habitat of *I. gabonensis* for soil chemical and physical properties analysis. Four soil profiles were also dug one in each land use system to determine the pattern of root distribution of *I. gabonensis*. The soil samples were analyses for pH, exchangeable aluminum, effective cation exchange capacity (ECEC), major elements (N, P, K, Ca, Mg), minor elements (Mn, Zn, Cu, Fe), organic carbon, aggregates stability, bulk density and texture. The results obtained indicate that *I. gabonensis* grows naturally on acid soils with low organic matter content, low level of effective cations exchange capacity (ECEC) and exchangeable bases, low available phosphorus, relatively high degree of Al saturation which changes with anthropic actions. No wide variation in soil texture was observed between land use systems while aggregates stability; bulk density and porosity highly differed. Results of root distribution of *I. gabonensis* indicate a linear relationship irrespectively of the land sue system.