calophyllum from seven to eight inches long, the Amyris caraña, and the mani. All these trees (with the exception of our new genus Retiniphyllum) were more than one hundred or one hundred and ten feet high. As their trunks throw out branches only toward the summit, we had some trouble in procuring both leaves and flowers. The latter were frequently strewed upon the ground at the foot of the trees; but, the plants of different families being grouped together in these forests, and every tree being covered with lianas, we could not, with any degree of confidence, rely on the authority of the natives, when they assured us that a flower belonged to such or such a tree. Amid these riches of nature heborizations caused us more chagrin than satisfaction. What we could gather appeared to us of little interest, compared to what we could not reach. It rained unceasingly during several months, and M. Bonpland lost the greater part of the specimens which he had been compelled to dry by artificial heat. Our Indians distinguished the leaves better than the corollæ or the fruit. Occupied in seeking timber for canoes, they are inattentive to flowers. "All those great trees bear neither flowers nor fruits," they repeated unceasingly. Like the botanists of antiquity, they denied what they had not taken the trouble to observe. They were tired with our questions, and exhausted our patience in return.

We have already mentioned that the same chemical properties being sometimes found in the same organs of different families of plants, these families supply each other's places in various climates. Several species of palms* furnish the inhabitants of equinoctial America and Africa with the oil which we derive from the olive. What the coniferæ are to the temperate zone, the terebinthaceæ and the guttiferæ are to the torrid. In the forests of those burning climates,

* In Africa, the elais or maba; in America the cocoa-tree. In the cocoa-tree it is the perisperm; and in the elais (as in the olive, and the oleineæ in general) it is the sarcocarp, or the pulp of the pericarp, that yields oil. This difference, observed in the same family, appears to me very remarkable, though it is in no way contradictory to the results obtained by De Candolle in his ingenious researches on the chemical properties of plants. If our Alfonsia oleifera belong to the genus Elais, (as Brown, with great reason believes,) it follows, that in the same genus the oil is found in the sarcocarp and in the perisperm.