

On these stony flats of Carichana we observed with interest the rising vegetation in the different degrees of its development. We there found lichens cleaving the rock, and collected in crusts more or less thick; little portions of sand nourishing succulent plants; and lastly layers of black mould deposited in the hollows, formed from the decay of roots and leaves, and shaded by tufts of evergreen shrubs.

At the distance of two or three leagues from the Mission, we find, in these plains intersected by granitic hills, a vegetation no less rich than varied. On comparing the site of Carichana with that of all the villages above the Great Cataracts, we are surprised at the facility with which we traverse the country, without following the banks of the rivers, or being stopped by the thickness of the forests. M. Bonpland made several excursions on horseback, which furnished him with a rich harvest of plants. I shall mention only the paraguatan, a magnificent species of the *macrocnemum*, the bark of which yields a red dye;\* the guaricamo, with a poisonous root;† the *Jacaranda obtusifolia*; and the *serrape*, or *jape*‡ of the Salive Indians, which is the *Coumarouna* of Aublet, so celebrated throughout Terra Firma for its aromatic fruit. This fruit, which at Caracas is placed among linen, as in Europe it is in snuff, under the name of *tonca*, or Tonquin bean, is regarded as poisonous. It is a false notion, very general in the province of Cumana, that the excellent liqueur fabricated at Martinique owes its peculiar flavour to the *jape*. In the Missions it is called *simaruba*; a name that may occasion serious mistakes, the true *simaruba* being a febrifuge species of the *Quassia* genus, found in Spanish Guiana only in the valley of Rio Caura, where the Paudacot Indians give it the name of *achechhari*.

I found the dip of the magnetic needle, in the great square at Carichana,  $33.7^{\circ}$  (new division). The intensity of the magnetic action was expressed by two hundred and twenty-seven oscillations in ten minutes of time; an increase of force that would seem to indicate some local attraction. Yet the blocks of the granite, blackened by the waters of the Orinoco, have no perceptible action upon the needle.

The river had risen several inches during the day on the

\* *Macrocnemum tinctorium*.

† *Ityania coccidea*.

‡ *Dipterix odorata*, Willd. or *Baryosma tongo* of Gaertner. The *jape* furnishes Carichana with excellent timber.