

the water, yield an extractive matter, that is brown, bitter, and mucilaginous; but how many tufts of smilax have we seen in places, where the waters were entirely white. In the marshy forest which we traversed, to convey our canoe from the Rio Tuamini to the Caño Pimichin and the Rio Negro, why, in the same soil, did we ford alternately rivulets of black and white water? Why did we find no river white near its springs, and black in the lower part of its course? I know not whether the Rio Negro preserves its yellowish brown colour as far as its mouth, notwithstanding the great quantity of white water it receives from the Cassiquiare and the Rio Blanco.

Although, on account of the abundance of rain, vegetation is more vigorous close to the equator than eight or ten degrees north or south, it cannot be affirmed, that the rivers with black waters rise principally in the most shady and thickest forests. On the contrary, a great number of the *aguas negras* come from the open savannahs that extend from the Meta beyond the Guaviare towards the Caqueta. In a journey which I made with Señor Montufar from the port of Guayaquil to the Bodegas de Babajo, at the period of the great inundations, I was struck by the analogy of colour displayed by the vast savannahs of the *Invernadero del Garzal* and of the *Lagartero*, as well as by the Rio Negro and the Atabapo. These savannahs, partly inundated during three months, are composed of *paspalum*, *erichloa*, and several species of *cyperaceæ*. We sailed on waters that were from four to five feet deep; their temperature was by day from 33° 34° of the centigrade thermometer; they exhaled a strong smell of sulphuretted hydrogen, to which no doubt some rotten plants of *arum* and *heliconia*, that swam on the surface of the pools, contributed. The waters of the *Lagartero* were of a golden yellow by transmitted, and coffee-brown by reflected light. They are no doubt coloured by a carburet of hydrogen. An analogous phenomenon is observed in the dunghill-waters prepared by our gardeners, and in the waters that issue from bogs. May we not also admit, that it is a mixture of carbon and hydrogen, an extractive vegetable matter, that colours the black rivers, the Atabapo, the Zama, the Mataveni, and the Guainia? The frequency of the equatorial rains contributes no doubt to this color-