The figure illustrates the water level fluctuation of two major river systems: the Orinoco River and the Parana River. The graphs show the relationship between precipitation and river stage height over a period of months, indicating how changes in water levels correspond to variations in rainfall.

**Habitat Involved**

The Orinoco River plays a crucial role in the biodiversity of the region. The river's high water level fluctuations provide a habitat for a diverse range of aquatic and riparian species. The wetlands created by these fluctuations serve as breeding grounds for bird species, while the flooded areas support a rich community of aquatic plants and animals.

**Introduction**

I. **Blanco-Belmonte, J.** Nich and A. Po de Nich

Hoodoos are unique rock formations that develop in arid environments. They are characterized by their tall, slender, and often colorful shapes that result from the erosion of sedimentary rocks. Hoodoos are found in various parts of the world, including the Peruvian desert, where they are known as "crippled trees." These formations are often studied for their geological significance and their role in geomorphology.

II. **Argentina**

Hoodoos are also found in the Argentine Pampa, a region known for its flat landscape and low rainfall. The Argentine Pampa is characterized by its vast grasslands and is home to a variety of vegetation types, including grasses, shrubs, and cacti. The hoodoos in this region are thought to be formed by the erosion of sedimentary rocks, similar to those found in other parts of the world.
Materials and methods

Samples were taken, at the border of numerous mosaics of different species (Nymphaea, Pistia, Ludwigia, Eichhornia) developed in the laboratory. The material was rinsed to obtain the organisms. The rinsed water was then filtered through a battery of three sieves (8, 10, and 40 μm). Organisms obtained from the first two sieves were counted directly under a Wild M5 microscope. The product of the first sieve was stained with 1% aqueous solution of rose bengal and then filtered. The stained material was examined under a Wild M5 microscope. Taxonomic identification was carried out to genus level in the laboratory.

The species described in the field are:

- Eichhornia crassipes
- Nymphaea sp.
- Pistia sp.
- Ludwigia sp.

Densities are expressed by organic carbon (0.2) and organic nitrogen (0.3) content of the lake water. The average density of the lake is 0.75 mg/L for organic carbon and 0.25 mg/L for organic nitrogen.

Results

This study was conducted in three different lakes: Casitas, Lagunas, and Mamo. The Casitas Lake is located at 27°37'S, 62°34'W, and is located near a meander of the Paraíba River, which flows into the Parana River at the end of the flood season. The lake is classified as a meadow pool, and it is characterized by a mosaic of different species, including Eichhornia crassipes, Pistia sp., and Nymphaea sp.

The Lagunas Lake is located at 27°40'S, 62°36'W, and is located near a meadow pool, representing a characteristic landscape of the Parana River. The lake is classified as a meadow pool, and it is characterized by a mosaic of different species, including Eichhornia crassipes, Pistia sp., and Nymphaea sp.

The Mamo Lake is located at 27°42'S, 62°38'W, and is located near a meadow pool, representing a characteristic landscape of the Parana River. The lake is classified as a meadow pool, and it is characterized by a mosaic of different species, including Eichhornia crassipes, Pistia sp., and Nymphaea sp.
Fig. 6. Lake San Nicolas (Arg) Functional Groups, River Height (m).

Fig. 7. Lake San Nicolas (Arg). IS = isolation phase, FP = filling phase.

A similar response was found for the Esperanza Lake during same year (IP = 49,450 mg m⁻², 24,617/0 mg m⁻², 100 g D.W., IP = 27,370 mg m⁻², 80,277/0 mg m⁻², 100 g D.W.). During F.P. (filling phase), abundances reach peak densities. Macroinvertebrates, cladocerans, and hydricardids, followed the southern side of the San Nicolls River. In June, the water flowed like a small stream, moving from one side to the other. On average, this major flood event only occurs every 5 to 10 years. During this exceptional flood, densities did not increase as expected. Cyclochaeta (a bivalve) whose presence was not recorded during the first filling phase, appeared in the second filling phase. The Parana River reached 8 m and overflowed the southern side of the San Nicolas River, moving from one side to the other.

On a functional level, similarities were observed regardless of flood pulses. Parana River. Percentage wise, collector-gatherer (mainly chironomids, Hyaeda sp., Hyalella sp., and Hydrochares sp.) and collector-filterer (copepods, cladocerans, and ostracods) were significantly higher in the Parana lakes during extraordinary floods and in the Orinoco lakes during their FP. Positive correlations were found between collector-gatherers (r = 0.927, p < 0.05) and shredders with colonizing efficiency during flood events. The Orinoco floodplain, such as the Orinoco, Malvado, and Orinoco, when a permanent vegetation border developed, indicate the presence of two annual peak densities, similar (200,000 mg m⁻² and 150,000 mg m⁻²) during flood, with the development of macrophytes occurs only during the rainy season, there exists only one observed density peak.
invertebrate fauna to better oxygen conditions. On the other hand, the significant number and species of beetles (76%) predators and 33% collectors of the total species of insects collected seem to carry a low oxygen concentration (r = -0.61, p < 0.05).

During the flooding phase, the Orinoco floodplains there seems to appear a "normal" flora, as opposed to the "normal" fauna found in the Orinoco floodplains. The Orinoco floodplains are less pronounced, which is due to the higher mean number of organisms found in the Orinoco floodplains. However, the Orinoco floodplains were more pronounced and the presence of organisms such as Cylindrotheca bolloni and Gyrtaxis sp., commonly found in the Orinoco floodplains, seems to respond better to a higher oxygen level in the floodplains.

**References**


Macroinvertebrates

