

Study of nitrogen removal by the naturally aerated lagoon systems

The objective of this work is to study first, the purifying operation of the natural lagoon ecosystem to determine the main factors responsible for nutrient salts removal (nitrogen, phosphorus) and evaluate, under summer conditions, the purification efficiencies of this system and understand secondly, the illumination effect on purification yields of the naturally aerated lagoon systems.

Over two ponds in series, supplied with ENSH's household wastewater, this were followed, on a five-day basis, by carbonaceous nitrogenous and phosphorous shapes, the variables distinguishing features of the photosynthetic and bacterial activity (chlorophyll, algal and bacterial enumeration, pH and O₂), climatic data (temperature and illumination) and the evolution of the physico-chemical parameters with relation to depth.