

**GIACHETTI, C.<sup>1</sup>, BATTINI, N.<sup>1</sup>, TATIÁN, M.<sup>2</sup>, & SCHWINDT, E.<sup>1</sup>**

<sup>1</sup> Grupo de Ecología en Ambientes Costeros, Instituto de Biología de Organismos Marinos (CENPAT-CONICET), Argentina

<sup>2</sup> Instituto de Diversidad y Ecología Animal (CONICET-UNC), Argentina  
*giachetti@cenpat-conicet.gob.ar*

### **Invasive ascidians: Do local predators play a key role in colonization success?**

Invasive ascidians are usually considered as pests in the invaded areas including aquaculture facilities. Predation might control the establishment and further colonization depending on the habitat and the predator/prey species involved in the interaction. In this work, we evaluate the effect of different potential predators on the survival of the adults of *Ascidella aspersa*, one of the most invasive ascidian species in Argentina. Predator and prey species were collected in Puerto Madryn port, transported to the aquarium and acclimated during seven days. As potential predators, we tested the exotic sea slug, as well as native sea stars and sea urchins. Several trials were made in individual tanks subdivided in two equal compartments (prey alone and prey plus one predator species). After a starvation period (2-9 days depending on the species), a predator was placed in a compartment with four ascidians during 2-4 days depending on the predator species. At the end, we quantified mortality percentage in both compartments, when it was zero, we offered to the predator his favourite prey to confirm that the rejection was not due to satiety. Ascidians were observed for a week to discard death due to tunic damage. Preliminary results showed that sea urchins and sea slugs feed upon the epibionts growing on the ascidian tunic, causing a superficial damage to the tunic but not killing the ascidians. Only sea stars were able to injure the tunic but the ascidians survived and lived with that injury. More experiments are being performed with a wider pool of predator species, including the voracious invasive green crab *Carcinus maenas*, and also evaluating the effects of predation on other invasive ascidians, including adults and juveniles. These results suggest that *A. aspersa* adults are strong enough for local predators, however the softer juveniles could be negatively affected by predation.