



Vulnerability of the copepod *Eurytemora affinis* to a co-occurring predator from the Seine estuary: influence of light, sex, and physiological state

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We studied the predator-prey interaction between the estuarine copepod *Eurytemora affinis*, caught from the Seine estuary, and its naturally co-occurring predator sea-bass, *Dicentrarchus labrax*, post-larva (TL=19.4±3 mm). Standard video techniques were used to estimate the actual capture success rates of *D. labrax* under both white light (3983±1000 Lux) and infra red light (0 Lux) conditions. Although feeding behavior was clearly enhanced during the visible light treatment; fish were also able to successfully feed on copepods in darkness. The investigation of the effect of sex and physiological state (non-ovigerous females and ovigerous females) of *E. affinis* on its vulnerability to predation displayed an apparent selectivity towards male copepods. The role of the escape response of the prey on its fate and its ecological consequences on the estuarine system are discussed.