A24 WHISTLES ANALYSIS AND COMPARISON OF TWO DELPHINIDAE SYMPATRIC SPECIES (*DELPHINUS DELPHIS* AND *STENELLA COERULEOALBA*) IN THE AREA OF CUMA CANYON (ISLAND OF ISCHIA ITALY)

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Sympatric occurrence of two related species is expected to lead to diverging or converging shifts in signal characteristics of one or both species. This study investigated acoustic similarities and variations between common (*Delphinus delphis*) and striped (*Stenella coeruleoalba*) dolphin around Ischia Island, a key feeding and breeding site for other cetacean species too, including *Grampus griseus*, *Physeter macrocephalus* and *Balaenoptera physalus*. We compared the species' whistle repertoires collected between 2004 and 2006: a) characterising the vocal parameters of frequency within a selected range (3-22000 Hz), b) measuring whistles' duration and c) examining the aforementioned acoustic parameters within two behavioural states (mating and feeding). A total number of 1369 minutes (471 min. in presence of common dolphins and 898 of striped dolphins), collected actively in 217 surveys using deployed hydrophones, was analysed by the means of Whistle Detector software. The investigation on over 27.000 whistles within the same frequency range revealed significant variations between the two species, with a strong behavioural relationship. The divergent pattern between sympatric populations would be expected to significantly reduce heterospecific mating in sympatry as well as optimize communication during feeding activities. Moreover, the analysis performed on whistles' duration showed the presence of highly stable values in each species, underlying major differences among common and striped dolphin. We speculated that this last finding could be valuably used for the acoustic discrimination and identification of the two species. Further studies appear to be necessary on other Mediterranean groups to support the congruence and significance of this hypothesis.

A25 LOW-FREQUENCY SOUNDS OF BELUGAS (*DELPHINAPTERUS LEUCAS*): THE CLASSIFICATION AND POSSIBLE FUNCTIONAL SIGNIFICANCE

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