

A preliminary diagnosis of pink lobster (*Palinurus charlestoni* FOREST & POSTEL, 1964) fishery in the archipelago of Cape Verde.

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Abstract: The pink lobster (*Palinurus charlestoni*) is an endemic to Cape Verde species of crustacean from to the family PALINURIDAE, with a great commercial value in the internal and external market. Based on the official data from landing statistics (INDP, 1986-2000) and on results, previously obtained by other authors (Almada Dias, 1994, Eide A., 1999), a preliminary diagnosis of the pink lobster fishery is presented . A variant of the Fox surplus production model, assuming a situation of pseudo-equilibrium (Brêthes and O'Boyle, 1990), was applied.

Four simulations were done, based on the assumption of annual catchability increase (Laloe F, in Brêthes and O'Boyle, 1990) and using different units of fishing effort (traps number; number of days at sea). In this sense, the Maximum Sustainable Yield was estimated in the order of 41 tones. Both the results, obtained in a present work and in previous assessments (Eide and col., 1999), lead to conclude that the pink lobster stock is over-exploited. From present analysis, is concluded that in an equilibrium situation, the Maximum Sustainable Yield could be reached reducing the actual fishing effort by 40%. Considering the limitations of the diagnosis based on surplus production model, is conclude that, lacking data on the dynamics of growth of the species and age structure of the stock, the model is an useful tool for making an preliminary diagnosis of the fishery. However the reviewing and up-dating of the diagnosis is recommended, not only using analytic models, but also using longest data series and more truthful fishing effort.