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Potential production of the Caribbean spiny lobster (Decapoda, Palinura) fisheries

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Spiny lobster *Panulirus argus* (Latreille, 1804) constitutes the most important fishery of the Caribbean; it accounts for nearly 42,000 tonnes. Evidence suggests that high fishing mortality (F) may have been overexploiting most stocks. An assessment was carried out providing the basis for a sustainable exploitation of the nine most important producing countries. Values were assessed and each fishery was simulated; age structure was reconstructed linking biological, economic, and social variables. The results show that advice is required to enhance recruitment and to restore biomass of most stocks. Among the nine fisheries examined in detail, the Bahamas, the main producer, is slightly overexploited, and the overexploitation of four others ranges from moderate to severe. An arbitrary F value, lower than the one producing the Maximum Sustainable Yield, or extreme reference point, is adopted as management target and was proposed for adoption by these fisheries; in order to attain the target, it implies gradual F reductions to restore stock biomass in eight fisheries and a slight increase of F in one case.

Palabras clave: Caribbean, Spiny lobster, *Panulirus argus*, Stock assessment

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