

ラオスの重要な食用魚パ・コーの生態的情報に基づく資源保全管理

Resource management and conservation of *Pa koh*, an important edible fish in Laos, based on ecological information

ラオスの重要漁業種であるパ・コー (*Channa striata*) は、美味かつ高価格であるため、盛んに漁獲され、近年資源量の減少が懸念されている。本研究では、本種の資源管理を目的に、耳石年輪、成長、繁殖に関する調査を通じて、本種の成熟サイズが体長約20cm(2歳)であり、また乾季後期の水温上昇期(3月以降)にメスの卵巣が急激に成熟し、4~6月に繁殖期を迎えることが確認された。これらの知見に基づき、本種の資源管理には、繁殖期間中に体長20cm以上の個体の漁獲制限(例えば禁漁区・禁漁期の設定)が効果的であると考えられた。

Pa koh (*Channa striata*) (Fig. 1) is under strong fishing pressure because of its daintiness and high market value, and the recent decline in stock has become a concern. A study was conducted to manage the stock, and ecological features (i.e., growth and breeding) were clarified based on age and gonad analyses. The findings indicate that the species matures at approx. 20 cm SL (2 years old) during April-June as the water temperature rises. Hence, fishing restriction on specimens larger than 20 cm SL during breeding period (from April-June) must be imposed. Setting a non-fishing period and/or non-fishing area(s) in breeding site(s) is considered efficient.

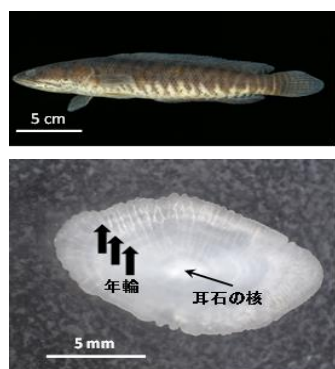


Fig. 1. Top: An adult *Pa koh* (24 cm SL); Bottom: Otolith and annual rings

図1. 上：パ・コー成魚（体長24 cm）、下：耳石と年輪（3歳と推定）

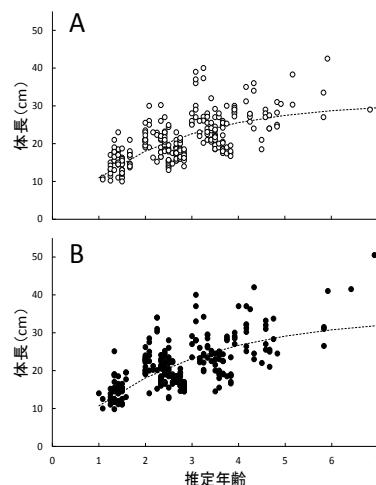


Fig. 2. Growth models of *Pa koh* (A: female; B: male)

図2. パ・コーの成長モデル(A:メス、B:オス)

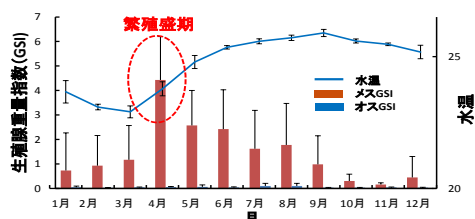


Fig. 3. Seasonal changes in the GSI of *Pa koh* and in water temperature.

図3. パ・コー雌雄の生殖腺重量指数 (GSI) と水温の季節変化

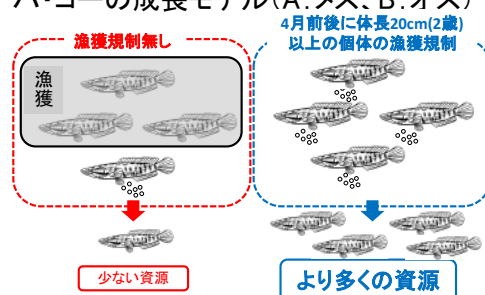


Fig. 4. Images showing the effects of unrestricted (left) and restricted fishing (right).

図4. 漁獲規制効果のイメージ

