Catch Analysis of Collapsible Pot for Blue Swimming Crab in Thailand (タイ国におけるガザミ籠漁具の漁獲解析)

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[Objective] The catch data from collapsible pot fishing for blue swimming crab *Portunus pelagicus* in Thailand was analyzed for better understanding on the size/species composition, in order to improve the capture function of crab pot to reduce the by-catch of immature crab and discard species.

[Methods] Field surveys were conducted by on-boarding operations with the crab pot boats both for small and commercial scales in the upper Gulf of Thailand in 2006. The catch data were analyzed to estimate CPUE and size/species compositions for understanding the discard problem with the results of discard rate and ratio. Catch performance of small and commercial scale operations were also compared from the view point of operation strategy of fishing effort and setting site difference.

[Results] Average CPUE from the small scale operation was 3.32 crab/pot, which was much higher than the commercial scale of 0.28 crab/pot. The composition of blue swimming crab for small scale occupied 66-92 % by number, while 39-51 % for commercial scale. Average discard ratio by number from small and commercial scales were 0.30 and 0.70, while average discard rate were 0.21 and 0.38, respectively. The crab size from small scale, however, was much smaller than commercial scale due to the differed fishing grounds according to distance from the shore. The by-catch from commercial scale consisted of 14-18 species was much higher than small scale of 8-11 species both in quantity and quality. The possible mitigation method will be discussed to reduce the catch of immature crab and discard species with maintaining the catch rate of mature crab.