Feb. 04, 2011: The Public Health Ministry's Department of Medical Sciences has created a world first by perfecting a 15 minute high accuracy test kit for tetrodotoxin in puffer fish and mangrove horseshoe crab.



Deputy Public Health
Minister Pansiri
Kulnartsiri said yesterday
that the TTXIC test kit,
using acetic acid as its

main component, worked similarly to a pregnancy test strip. If the result showed one red line, that meant toxic and two red lines meant nontoxic.

The test kit is also inexpensive, at Bt120 (S\$5) per set, and is sold by the department in boxes containing 12 sets for Bt1,200.

Pansiri said that previously, a single test for tetrodotoxin took half a day and cost between Bt1,000 and Bt2,000.

Department chief Sathaporn Wongcharoen said the test kit - which had a sensitivity rate of 100 per cent and a specificity rate of 80 per cent - was invented by researcher Aree Thattiyawong, from the National Institute of Health, who had been studying tetrodotoxin since 2006.

Thailand has about 20 types of puffer fish, both toxic and nontoxic, and two types of horseshoe crabs - the giant king crab and the mangrove horseshoe crab. In 2001, 20 people died and another 60 became ill after eating pufferfish meat or crab eggs.

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