

浸泡型弧菌疫苗效力試驗評估模式建立

動物用藥品檢定中心

張家嘉 副研究員

摘要

水產用疫苗的施用方式除傳統的注射型（如肌肉或腹腔注射）外，亦開發出許多浸泡型或口服型劑型。傳統的注射型疫苗通常具有良好的免疫效果和保護力，但操作困難且耗費人力，降低了農民的使用意願。相比之下，浸泡型或口服型疫苗操作簡便，可一次免疫大量魚隻，成為現今魚用疫苗的發展趨勢。本研究為自日本引進已上市的浸泡型弧菌疫苗疫苗施用於國內養殖虹鱒，以建立浸泡型疫苗效力評估方法，供國內研發浸泡型疫苗效力評估之參考方法。

Development of an Evaluation Model for the Efficacy of Immersion-type *Vibrio* Vaccines

Chia-Chia Chang

Abstract

In addition to conventional injectable vaccines, such as intramuscular or intraperitoneal injections, various immersion and oral vaccine formulations have been developed for aquaculture purposes. Injectable vaccines typically elicit strong immune responses and provide effective protection, but they are characterized by inconvenience and labor intensity, factors that often diminish farmers' adoption rates. In contrast, immersion and oral vaccines offer greater convenience, enabling the simultaneous immunization of a large number of fish, thereby making them the current trend in fish vaccine development.

This study introduces a commercially available immersion-type *Vibrio* vaccine from Japan and assesses its application in the cultivation of domestic rainbow trout. The primary objective is to establish a methodology for evaluating the efficacy of immersion vaccines, aiming to serve as a reference for the development of standardized protocols for evaluating the efficacy of domestically developed immersion vaccines.