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Collaborative genetics program in Vietnam leads to big FCR gains with barramundi

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By Responsible Seafood Advocate

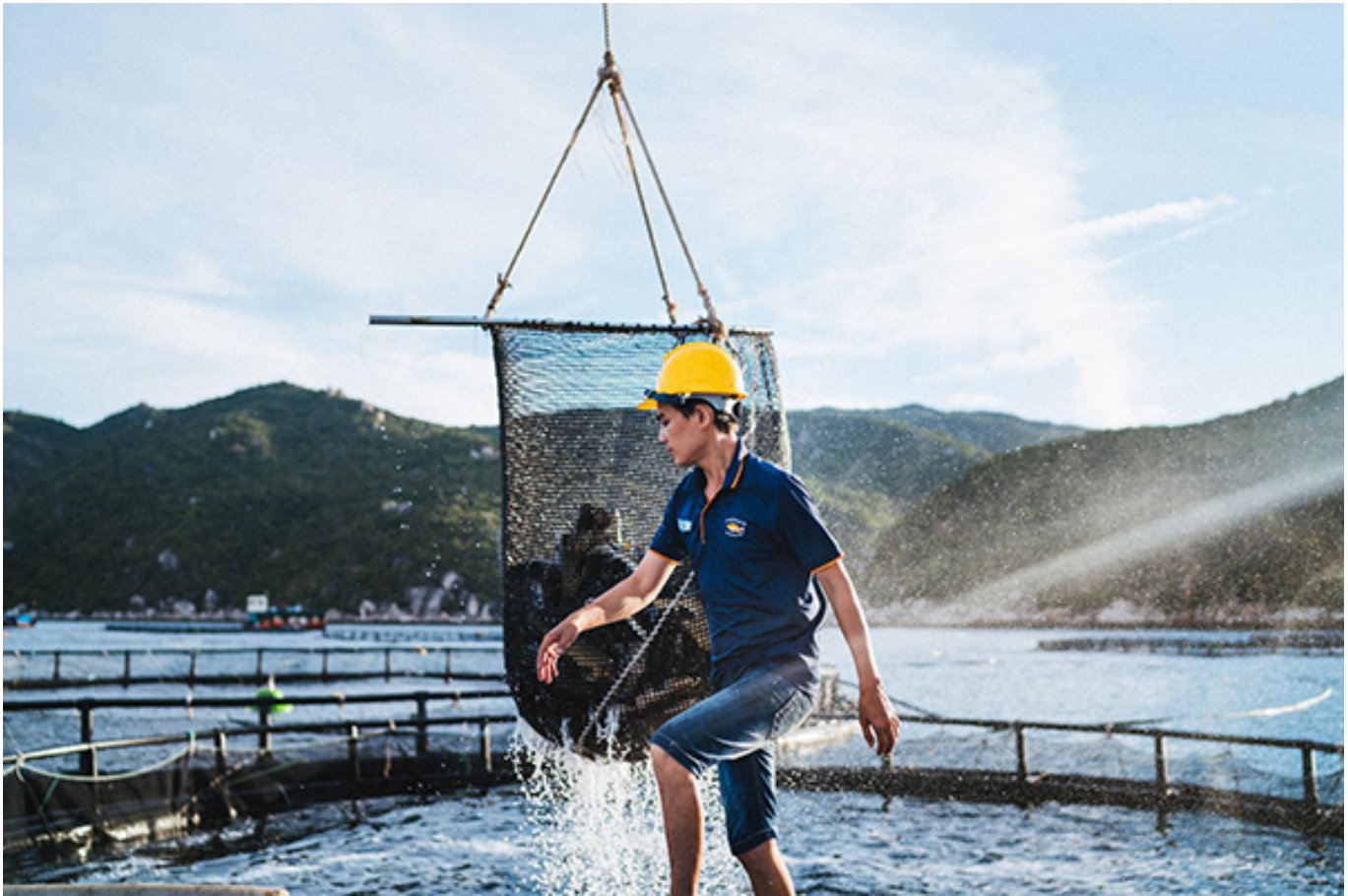
Xelect and Australis team up to increase feed efficiency

Scotland-based specialist genetics company **Xelect** (<https://xelect-genetics.com/>), said that an ongoing advanced genetics-based breeding program with **Australis Aquaculture** (<https://www.thebetterfish.com/>) in Vietnam has resulted in major feed-efficiency gains with barramundi.

The two companies began working together in 2018 to better understand the link between genetics and feed efficiency, or feed conversion ratio (FCR), the standard measurement. FCR is the ratio between the amount of food consumed and the weight gained.

FCR has been difficult to measure in commercial aquaculture settings, the companies said, and researchers have relied on other characteristics like fasting tolerance – the ability to maintain weight when feed is withheld for short periods – as a proxy for FCR.

“Essentially, an individual that spends less energy maintaining weight has a lower maintenance energy requirement, which translates to improved feed efficiency,” said Dr. Marie Smedley, senior breeding



Xelect's advanced genetics-based breeding program with Australis Aquaculture has resulted in major feed-efficiency gains with barramundi.

program manager at Xelect. "Our latest trial with Australis suggests that significant gains are possible – with high-weight maintenance groups showing a 12 percent improvement in FCR over low-weight maintenance individuals. Therefore, fasting evaluations can be performed routinely to select the most efficient broodstock in Australis' breeding program."



(<https://globalseafood.typeform.com/podcastq124>).

The trial concluded in November. Feed is typically the largest single expense for aquaculture producers, representing up to two-thirds of total production costs, the companies noted.

"We were thrilled by the strength of the results and power of the analysis, which has allowed us to assess large number of individuals for such an economically important trait," said Josh Goldman, CEO of Australis.

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