

Optimización del medio KDM2 para acelerar el crecimiento de *Renibacterium salmoninarum* en la vigilancia de BKD

A. Yañez^{1,2*}, S. Flores-Martin³, M. Aguilera³, C. Barrientos³, J. Figueroa³, A. Isla^{2,3,4}, M. Rauch⁵, R. Enríquez⁶ y F. Almendras¹

¹ Departamento de Investigación y Desarrollo, Greenvolution SpA., Puerto Varas, Chile

² Interdisciplinary Center for Aquaculture Research (INCAR), Universidad de Concepción, Concepción, Chile

³ Laboratorio de Biología Molecular de Peces, Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile, Valdivia, Chile.

⁴ Departamento de Ciencias Básicas, Facultad de Ciencias, Universidad Santo Tomás, Valdivia, Chile

⁵ Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile, Valdivia, Chile

⁶ Instituto de Patología Animal, Facultad de Ciencias Veterinarias, Universidad Austral de Chile, Valdivia, Chile

*ajyanezc@gmail.com; alejandro.yanez@greenvolution.cl.

I+D+i

- Austin, B., & Austin, D. 2012. Bacterial fish pathogens: disease of farmed and wild fish. 6th ed. Springer, New York.
- Daly, J., Griffiths, S., Kew, A., Moore, A. & Olivier, G. 2001. Characterization of attenuated *Renibacterium salmoninarum* strains and their use as live vaccines. Diseases of Aquatic Organisms, 44: 121-126.
- Delghandi, M., El-Matbouli, M. & Menanteau-Ledouble, S. 2020. *Renibacterium salmoninarum*—the causative agent of bacterial kidney disease in salmonid fish. Pathogens, 9: 845.
- Evelyn, T. & Prosperi-Porta, L. 1989. Inconsistent performance of KDM2, a culture medium for the kidney disease bacterium *Renibacterium salmoninarum*, due to variation in the composition of its peptone ingredient. Diseases of Aquatic Organisms, 7: 227-229.
- Faisal, M., Eissa, A. & Starliper, C. 2010. Recovery of *Renibacterium salmoninarum* from naturally infected salmonine stocks in Michigan using a modified culture protocol. Journal of Advanced Research, 1: 95-102.
- Flores-Martin, S., Isla, A., Aguilar, M., Barrientos, C., Blanco, J., Rauch, M., Enríquez, R., Arcos, C. & Yañez, A. 2024. Optimizing culture medium to facilitate rapid *Renibacterium salmoninarum* growth. Aquaculture, 587: 740798.
- Hirvelä-Koski, V. 2008. The fish pathogen *Renibacterium salmoninarum*: growth in a microaerophilic atmosphere. Veterinary Microbiology, 127: 191-195.
- Matsui, T., Nishizawa, T. & Yoshimizu, M. 2009. Modification of KDM-2 with culture-spent medium for isolation of *Renibacterium salmoninarum*. Fish Pathology, 44: 139-144.
- Purcell, M., McKibben, C., Pearman-Gillman, S., Elliott, D. & Winton, J. 2016. Effects of temperature on *Renibacterium salmoninarum* infection and transmission potential in Chinook salmon, *Oncorhynchus tshawytscha* (Walbaum). Journal of Fish Diseases, 39: 787-798.
- Wiens, G., Rockey, D., Wu, Z., Chang, J., Levy, R., Crane, S., Chen, D., Capri, G., Burnett, J., Sudheesh, P., Schipma, M., Burd, H., Bhattacharyya, A., Rhodes, L., Kaul, R. & Strom, M. 2008. Genome sequence of the fish pathogen *Renibacterium salmoninarum* suggests reductive evolution away from an environmental Arthrobacter ancestor. Journal of bacteriology, 190: 6970-6982.