

Title (en)

ZOOPLANKTON ENRICHMENT WITH PROBIOMTS AND PREBIOMTS AND USES THEREOF

Title (de)

ZOOPLANKTON-ANREICHERUNG MIT PROBIOMTEN UND PREBIOMTEN UND IHRE VERWENDUNG

Title (fr)

ENRICHISSEMENT DE ZOOPLANCTON AVEC DES PROBIOMTS ET DES PREBIOMTS ET LEURS UTILISATIONS

Publication

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Application

**EP 03734050 A 20030610**

Priority

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Abstract (en)

[origin: WO03103692A1] Probiomt- and prebiomt-loaded zooplankton, such as Brachionus plicatilis and Artemia nauplii, are obtained by culturing zooplankton in the presence of the probiomts or prebiomts. Probiomts or prebiomts are loaded into zooplankton in such a manner as to maintain their viability and/or bioactivity. Zooplankton are cultured with free or microencapsulated probiomts and/or prebiomts, and used as a vector for probiomt and/or prebiomt delivery to larval and juvenile fish, and crustaceans. The survival rate in breeding larvae and juveniles can be remarkably improved by feeding the probiomt- and/or prebiomt-containing zooplankton to the larvae or juveniles.

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Citation (search report)

- [X] DATABASE WPI Week 198948, Derwent World Patents Index; AN 1989-352039, XP002439037
- [X] DATABASE WPI Week 200103, Derwent World Patents Index; AN 2001-016799, XP002439010
- [XY] SKJERMO J ET AL: "Techniques for microbial control in the intensive rearing of marine larvae", AQUACULTURE, AMSTERDAM, NL, vol. 177, no. 1-4, July 1999 (1999-07-01), pages 333 - 343, XP002964199
- [XY] OZKIZILCIK S ET AL: "EVALUATION OF OMEGA-3 FATTY ACID ENRICHMENT OF ARTEMIA NAUPLII AS FOOD FOR STRIPED BASS MORONE SAXATILIS WALBAUM LARVAE", JOURNAL OF THE WORLD AQUACULTURE SOCIETY, vol. 25, no. 1, 1 March 1994 (1994-03-01), pages 147 - 154, XP000560087
- [XY] LUCIA-PAVON E ET AL: "EFFECT OF DIFFERENT DENSITIES OF LIVE AND DEAD CHLORELLA VULGARIS ON THE POPULATION GROWTH OF ROTIFERS BRACHIONUS CALYCIFLORUS AND BRACHIONUS PATULUS (ROTIFERA)", REVISTA DE BLOGIA TROPICAL, UNIVERSIDAD DE COSTA RICA, SAN JOSE, CR, vol. 49, no. 3-4, September 2001 (2001-09-01), pages 895 - 902, XP001536351, ISSN: 0034-7744
- [XY] VERSCHUERE L ET AL: "PROBIOTIC BACTERIA AS BIOLOGICAL CONTROL AGENTS IN AQUACULTURE", MICROBIOLOGY AND MOLECULAR BIOLOGY REVIEWS, AMERICAN SOCIETY FOR MICROBIOLOGY, US, vol. 64, no. 4, December 2000 (2000-12-01), pages 655 - 671, XP009085480, ISSN: 1092-2172
- [XY] MONTANARI MARIA PIA ET AL: "Vibrios associated with plankton in a coastal zone of the Adriatic Sea (Italy)", July 1999, FEMS MICROBIOLOGY ECOLOGY, VOL. 29, NR. 3, PAGE(S) 241-247, ISSN: 0168-6496, XP009085491
- [Y] DATABASE TCM [online] SIPO; 26 April 2000 (2000-04-26), SHANDONG AGRICULTURE UNIVERSITY; FEEDSTUFF SUPERVISION OFFICE OF SHANDONG PROVINCE: "Probiotics Microcapsule", XP002438996, Database accession no. CN-99112136-A
- [Y] KOO SUN-MO ET AL: "IMPROVEMENT OF THE STABILITY OF LACTOBACILLUS CASEI YIT 9018 BY MICROENCAPSULATION USING ALGINATE AND CHITOSAN", JOURNAL OF MICROBIOLOGY AND BIOTECHNOLOGY, KOREAN SOCIETY FOR APPLIED MICROBIOLOGY, SEOUL, KO, vol. 11, no. 3, June 2001 (2001-06-01), pages 376 - 383, XP009085485, ISSN: 1017-7825 & CN 1251388 A 20000426 - UNIV SHANDONG AGRICULTURE [CN]
- See references of WO 03103692A1

Cited by

US7998502B2; US9205151B2

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