TECHNICAL SHEET

Tilapia production all males

Presentation of tilapia

Tilapia refers to certain fish of the family Cichlidae. TREWAVAS (1983) quoted by OUEDRAOGO (2000) proposed a generic distinction, which separates Tilapia into three genera: Tilapia, **Oreochromis** and Sarotherodon. The size of this fish varies between 5 and 50 centimetres. The Nile tilapia is one of the tropical species that prefers to live in shallow water. The lower and upper lethal temperatures for this fish are 11-12 °C and 42 °C, respectively, while the optimal temperatures vary between 31 and 36 °C.

Tilapia reproduction

Tilapia are asynchronous breeders, meaning that the different reproductive factors do not occur at the same time or at the same rate. Spawning occurs throughout the year in tropical regions and during the warm season in subtropical regions (FAO, 2009). The stocking ratio of females to males is 1-4:1 but the most common is 2 or 3:1. Broodstock stocking rates are variable, ranging from 0.3-0.7 kg/m2 in small ponds to 0.2-0.3 kg/ m2 in ponds (FAO, 2009). Commercial production of tilapia generally requires unisexual populations consisting of males only (FAO, 2009). Male tilapia grow about twice as fast as females (FAO, 2009). As a result, mixed-sex populations show great inequality in size, which affects sales (FAO, 2009).

Example of tilapia reproduction from a male

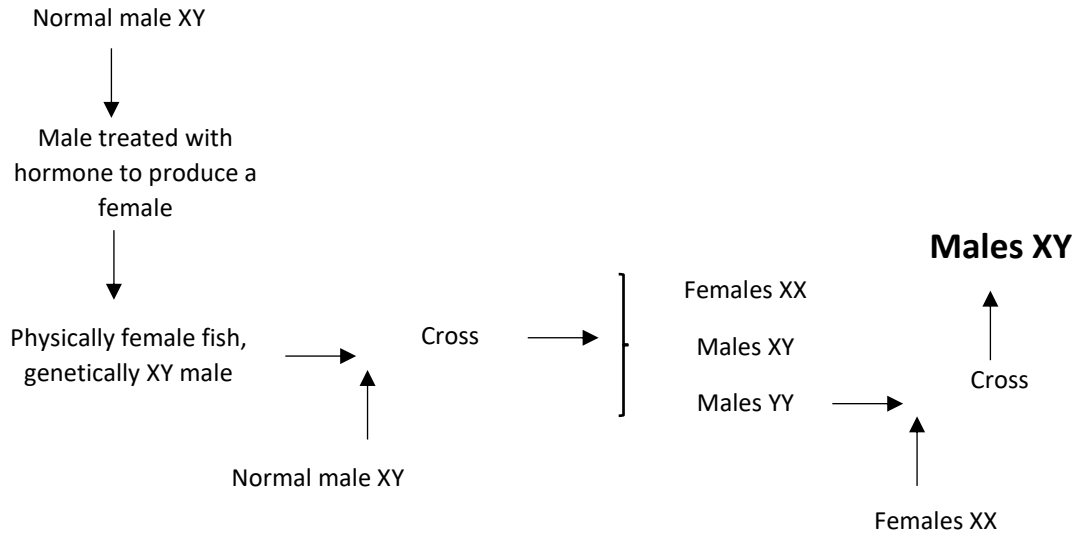

Figure 1: Production of male descent by using a male (source: http://www.fao.org/3/y4490f/y4490f07.htm)

Bibliographic references

FAO (2009) : Cultured aquatic species fact sheets, *Oreochromis niloticus* **(Linnaeus, 1758) [Cichlidae].** In Cultured aquatic species fact sheets. Text by Rakocy, J. E. Edited and compiled by Valerio Crespi and Michael New. CD-ROM (multilingual).

OUEDRAOGO (2000) : Biologie de reproduction du tilapia : Oreochromis niloticus du lac de barrage de la COMOE ; Mémoire de fin d'étude option Eaux et Forêts ; Université Polytechnique de Bobo-Dioulasso ; 77p.

Websites consulted

http://www.fao.org/fishery/docs/DOCUMENT/aquaculture/CulturedSpecies/file/fr/fr_niletilapia.htm ; 07/07/2021 at 12h06

https://fr.wikipedia.org/wiki/Tilapia ; 07/07/2021 at 12h11

https://www.researchgate.net/publication/330362666_Production_en_masse_d'alevins_males_de_Tilapia_Oreochromis_niloticus_de_la_vallee_du_fleuve_Senegal_a_partir_de_l'aliment_hormone_au_17_alpha_methyl_testosterone ; 07/07/2021 at 12h45

http://www.fao.org/3/y4490f/y4490f07.htm ; 07/07/2021 at 15h22

http://www.beep.ird.fr/collect/upb/index/assoc/IDR-2000-OUE-BIO/IDR-2000-OUE-BIO.pdf ; 07/07/2021 at 16h31

Other references

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