



FishBase

INTRODUCTION

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1. Historique de FishBase

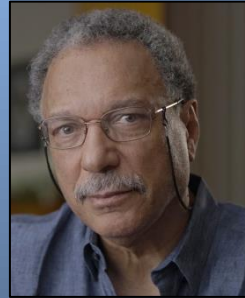
1988

- Projet proposé à ICLARM en **1988** par D. Pauly et R. Froese: données pour 200 espèces; objectif final de 2.500 espèces



Rainer Froese

GEOMAR – Helmholtz-
Zentrum für Ozeanforschung
(Kiel, Allemagne)



Daniel Pauly

University of
British Columbia
(UBC) – Institute
for Oceans and
Fisheries (Canada)

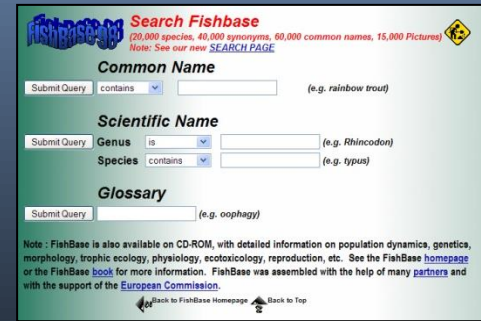
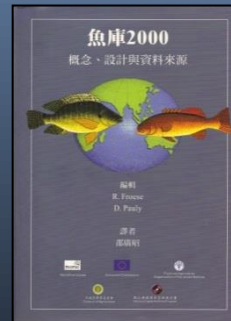


1. Historique de FishBase

1989

2000

- **1989 – 2000**: développement de FishBase par ICLARM (WorldFish) en collaboration avec FAO; financé par des subventions successives de la Commission européenne (première en 1989)
 - 1990-1995: contrôle de la qualité des données et implémentation; utilisation des révisions les plus récentes pour la taxinomie.
 - Activités continues: ajouter des données, inspection et amélioration de la base de données, contrôle de la qualité.
 - Lancement du premier CD en 1994; nouvelles versions en 1995 et 1996; FishBase 1997 et 1998 produits sur 2 CDs, FishBase 1999 déjà sur 3 CDs.
 - dès 1998 la possibilité de chercher dans la base de données sur internet.



1. Historique de FishBase

1988

2000

- **2000**: changement important → le financement de la Commission européenne cesse et le Consortium FishBase est établi pour garantir la continuation du projet



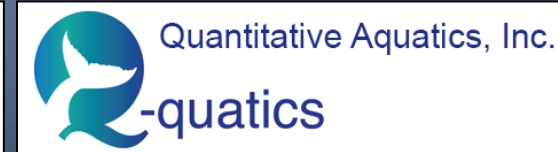
(Depuis 2004)



(Depuis 2007)



(Depuis 2014)

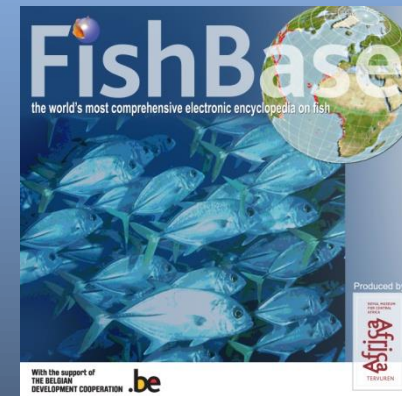


1. Historique de FishBase

1988

2000

- Août 2000: le cap de 25000 espèces est dépassé.
Début 2008: 30000 espèces dans FishBase
- FishBase 2000 produit sur 4 CDs, FishBase 2004 disponible sur 5 CDs ou 1 DVD, dernière version (FishBase 2013) uniquement sur DVD



1. Historique de FishBase

1988

2000

2018

- 2018:

- FishBase est une encyclopédie en ligne avec de l'information sur tous les poissons
- février 2018: 33.900 espèces, 323.100 noms communs en 350 langues, 58.600 photos, 54.700 références, 2.300 collaborateurs
- Interface et pages traduites en différentes langues
- 700.000 visites et 400.000 visiteurs unique par mois
- 7 sites miroirs: accès public, mis à jour trimestrielle

Miroirs : fishbase.org | fishbase.us | fishbase.de | fishbase.se | fishbase.tw | [中国镜像](#) | fishbase.ca
[English](#) | [Español](#) | [Português \(Br, Pt\)](#) | [Français](#) | [Deutsch](#) | [Italiano](#) | [Nederlands](#) | [简体中文](#) | [繁體中文](#) | [日本語](#) [[More...](#)]



FishBase
ver. (02/2018)

**(33900 Espèces, 323100 Noms communs, 58600 Images,
54700 Références, 2300 Collaborateurs, 700000
Visits/Month)**

[Accueil](#) | [Livre FishBase](#) | [Meilleures photos](#) | [Notes](#) | [Livre d'or](#) | [Télécharger](#) | [Liens](#) | [Fish Forum](#) | [Fish Quiz](#) |
[FishWatcher](#) | [Cours d'Ichtyologie](#) | [LarvalBase](#) | [Équipe](#) | [Collaborateurs](#) | [Identification](#) | [Services](#)

1. Historique de FishBase

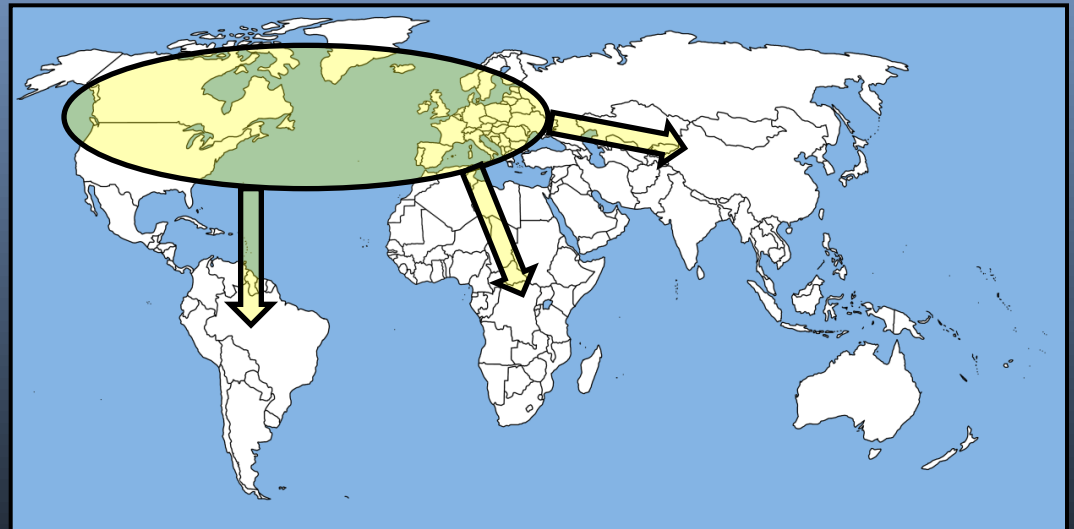
FishBase = la plus importante base de données en ligne au monde consacrée aux poissons

But principal de FishBase:

Centraliser, transférer et partager la connaissance et l'information concernant les poissons vers les pays en voie de développement, souvent sans bibliothèques ou autres accès à l'information.



FishBase

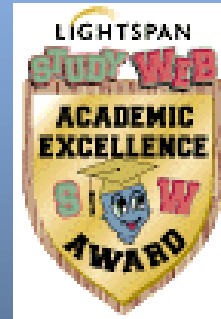


1. Historique de FishBase

- Critiques positives dans des journaux internationaux:

Aquaculture, Journal of Fish Biology, Nature, Japanese Journal of Ichthyology, Environmental Biology of Fishes, Reviews in Fish Biology and Fisheries, Science.

- FishBase Awards:



- Littérature scientifique: plus de 2200 publications scientifiques réfèrent à FishBase

1. Historique de FishBase

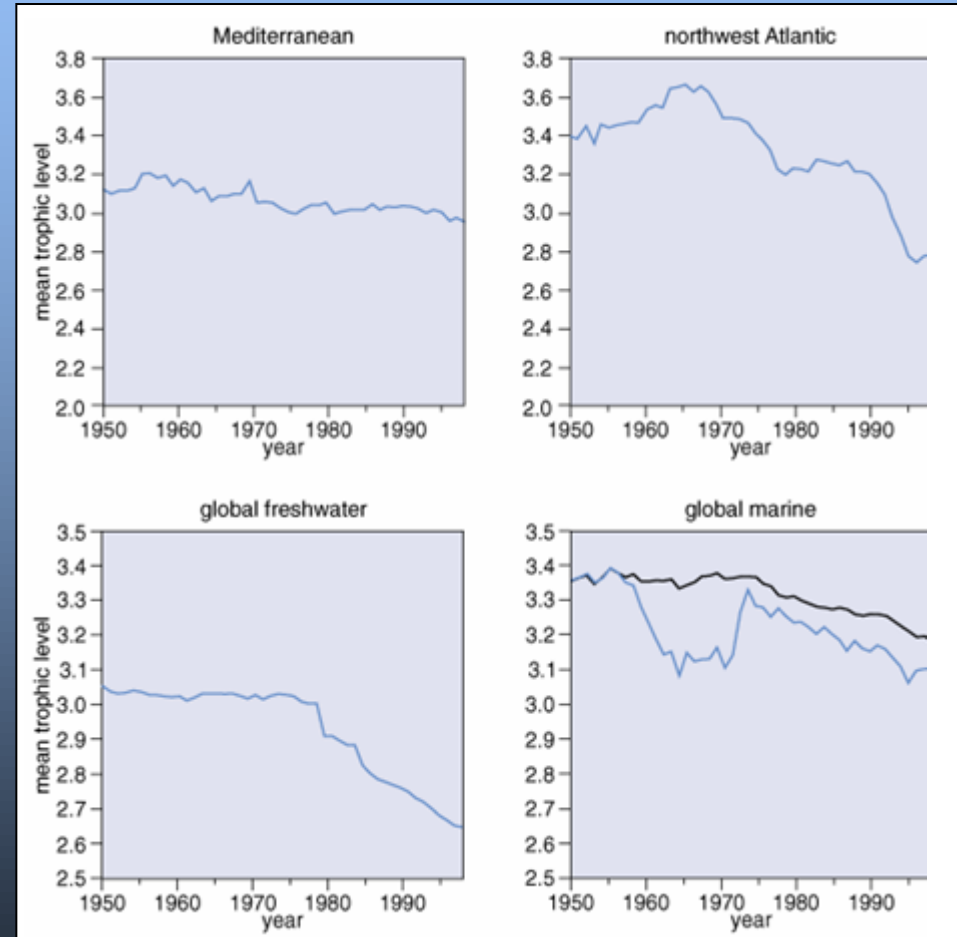
- Les données accumulées permettent des nouvelles études scientifiques (p.ex. “Fishing down food webs”).

Pauly, D., V. Christensen, J. Dalsgaard, R. Froese and F. Torres Jr. (1998). Fishing down marine food webs. *Science* 279: 860-863.

Fishing Down Marine Food Webs

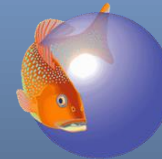
Daniel Pauly,* Villy Christensen, Johanne Dalsgaard, Rainer Froese, Francisco Torres Jr.

The mean trophic level of the species groups reported in Food and Agricultural Organization global fisheries statistics declined from 1950 to 1994. This reflects a gradual transition in landings from long-lived, high trophic level, piscivorous bottom fish toward short-lived, low trophic level invertebrates and planktivorous pelagic fish. This effect, also found to be occurring in inland fisheries, is most pronounced in the Northern Hemisphere. Fishing down food webs (that is, at lower trophic levels) leads at first to increasing catches, then to a phase transition associated with stagnating or declining catches. These results indicate that present exploitation patterns are unsustainable.



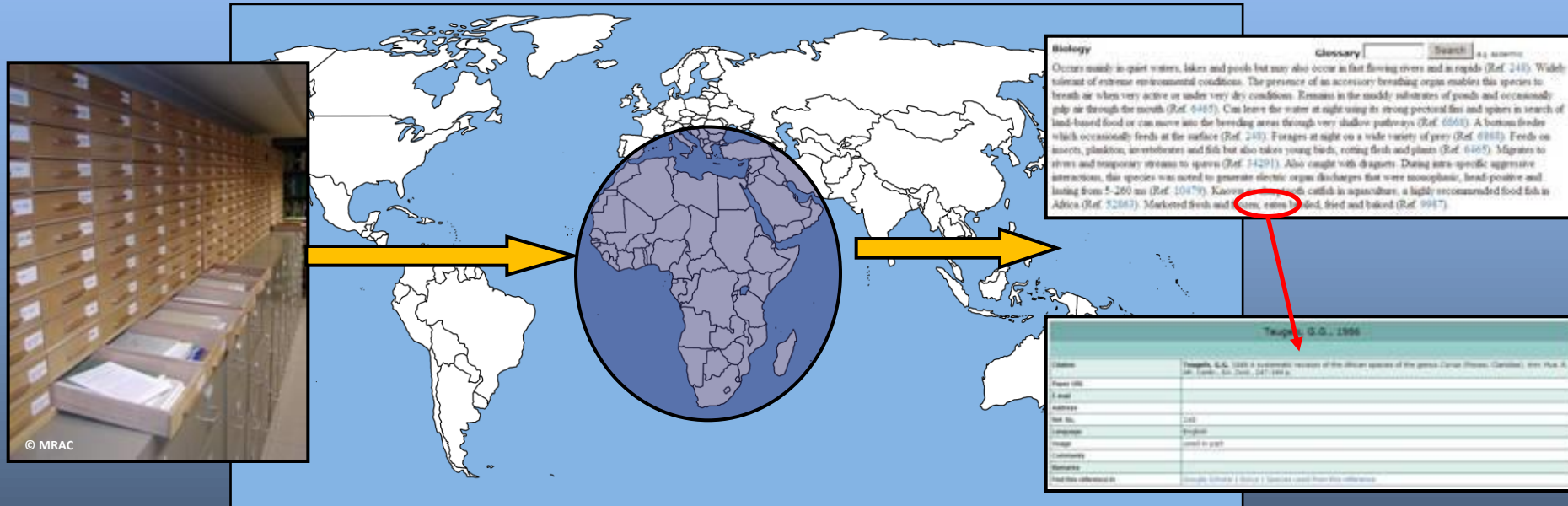
2. FishBase au MRAC

- le MRAC est un des membres fondateurs du Consortium FishBase
- Contribution originelle: fournir une copie électronique de la collection, avec des mises à jour annuelles; à présent environ 86000 enregistrements et 1.000.000 spécimens
- L'équipe FishBase du MRAC:
 - Jos Snoeks (responsable du projet)
 - Gert Boden (depuis 1997)
 - Tobias Musschoot (depuis 2004)
 - Dimitri Geelhand (2013-2016)
 - Luis da Costa (2016)

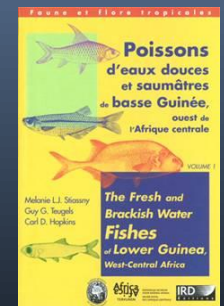
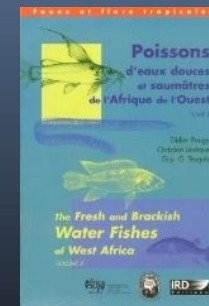


2. FishBase au MRAC

- L'équipe est responsable de la validation et de l'actualisation de l'information concernant les poissons d'eaux douces et saumâtres d'Afrique, à partir de publications scientifiques



- Activités principales: actualiser l'information des espèces et de leur taxinomie, ajouter de nouvelles espèces, compléter des listes ichtyofaunistiques, ajouter l'information des guides ichtyologiques, ...



2. FishBase au MRAC

Stages de formation “FishBase et taxinomie des poissons”:

- Depuis 2005, le MRAC organise chaque année un stage pour 5 scientifiques africains (français/anglais) pendant 3 mois
- Depuis 2009: stage suivi FishBase
 - 4 semaines
 - compléter étude de cas
 - 1-2 alumni par an
- 2015-2017: stage local FishBase
 - Sénégal, Kenya, Cameroun
 - Environ 1 semaine
 - théorie, pratique, excursion
 - en collaboration avec ancien stagiaire FishBase

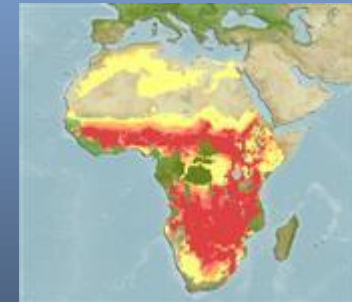


2. FishBase au MRAC

- Mais aussi:
 - Production et distribution du DVD FishBase (2013)
 - Collaboration avec UICN
 - Développement des “Aquamaps for Africa”
 - Présenter FishBase aux visiteurs du musée, pendant des conférences,...
 - Compléter les noms communs des poissons africains, en collaboration avec les stagiaires de la formation “FishBase et la taxinomie des poissons”



Le rapport pan-africain, publié en 2011



Stagiaires de la formation FishBase pendant la conférence PAFFA 5 (Burundi)

3. FishBase

3.1. Page de recherche

sites miroirs & langues

www.fishbase.org

Mirrors : fishbase.org | fishbase.us | fishbase.de | fishbase.se | fishbase.tw | fishbase.cn | fishbase.ca

English | [Español](#) | [Português \(Br, Pt\)](#) | [Français](#) | [Deutsch](#) | [Italiano](#) | [Nederlands](#) | [简体中文](#) | [繁體中文](#) | [日本語](#) | [More...](#)

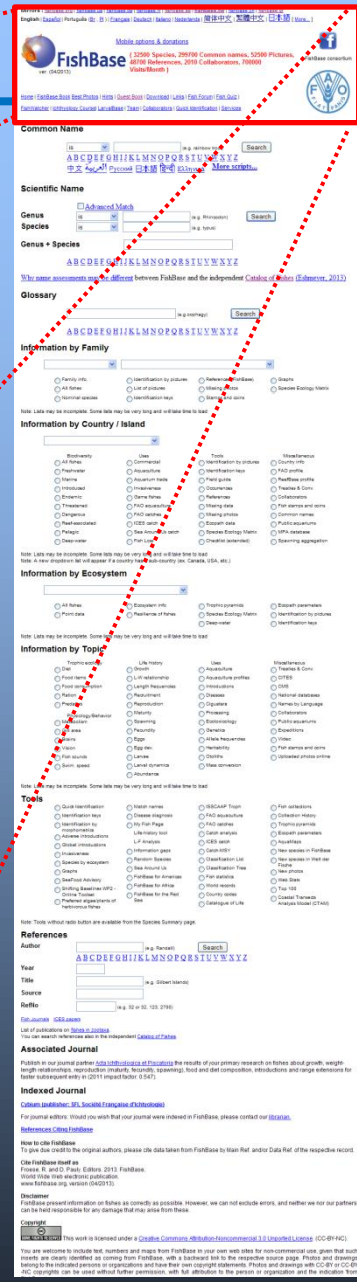


FishBase
ver. (06/2017)

(33600 Species, 319100 Common names, 58300 Pictures, 54100 References, 2290 Collaborators, 600000 Visits/Month)

[Home](#) | [FishBase Book](#) | [Best Photos](#) | [Hints](#) | [Guest Book](#) | [Download](#) | [Links](#) | [Fish Forum](#) | [Fish Quiz](#) | [FishWatcher](#) | [Ichthyology Course](#) | [LarvalBase](#) | [Team](#) | [Collaborators](#) | [Quick Identification](#) | [Services](#)

contenu actuel de FishBase



Common Name
[Search]

Scientific Name
[Search]

Genus
[Search]

Species
[Search]

Genus + Species
[Search]

Information by Family
[Search]

Information by Country / Island
[Search]

Information by Ecosystem
[Search]

Information by Topics
[Search]

References
[Search]



3.1. Page de recherche

Deux stratégies pour trouver une espèce: par nom commun ou nom scientifique



Nom Commun

est (e.g. rainbow trout)

ABCDEFGHIJKLMNOPQRSTUVWXYZ
中文 العربية Русский 日本語 हिन्दी Ελληνικά [Autres alphabets...](#)

Nom scientifique

[Advanced Match](#)

Genre: est (e.g. Rhincodon)

Espèce: est (e.g. typus) Random Species

Genre + Espèce: Sp. ID:

ABCDEFGHIJKLMNOPQRSTUVWXYZ

[Why name assessments may be different](#) between FishBase and the independent [Catalog of Fishes \(Eschmeyer, 2014\)](#)

Glossaire

(ex. oophagy)

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Glossaire

FishBase 12049 Species, 299700 Common names, 52000 Pictures, 48764 Bibliographies, 2780 Collaborators, 200000 Videos (March)

Common Name:

Scientific Name:

Genus:

Species:

Genus + Species:

[Why name assessments may be different](#) between FishBase and the independent [Catalog of Fishes \(Eschmeyer, 2014\)](#)

Advanced Match:

Information by Family:

Information by Country / Island:

Information by Ecosystem:

Information by Topic:

Tools: All names, Family only, Random Species, Sp. ID,

References:

Associated Journal:

Index Journal:

How to cite FishBase:

Disclaimer:



3.1. Page de recherche

Informations par Famille

Famille Info Identification Références (FishBase) Graphiques
 Tous les poissons Images Photos manquantes Matrice Ecologie
 Espèce(s) nominale(s) Clés d'identification Timbres

Note : Les listes peuvent être incomplètes. Certaines listes peuvent être très longues à télécharger

Informations par Pays / île

Biodiversité Utilisations Outils Divers
 Tous les poissons Commercial Identification Info. pays
 Eau douce Aquaculture Clés d'identification Profil FAO
 Marin Commerce aquariophilie Guide de terrain Informations de ReefBase
 Introduit Espèces Invasives Occurrences Traités et Conv.
 Endémique Poissons de pêche sportive Références Collaborateurs
 Menacé Aquaculture FAO Données manquantes Timbres avec poissons
 Dangereux Prises FAO Photos manquantes Noms communs
 Réotil Captures CIES Paramètres Ecoopath Aquariums publics
 Pêlagique Sea Around Us Matrice Ecologie Base de données AMP
 Eaux-profondes Perte de poisson Checklist (extended) Rassemblement de ponte

Note : Les listes peuvent être incomplètes. Certaines listes peuvent être très longues à télécharger
 Note: A new dropdown list will appear if a country has a sub-country (ex. Canada, USA, etc.)

Informations par Écosystème

Tous les poissons Écosystème info. Pyramides trophiques Paramètres Ecoopath
 Coordonnées géographiques Résilience Matrice Ecologie Identification
 Eaux-profondes Clés d'identification

Note : Les listes peuvent être incomplètes. Certaines listes peuvent être très longues à télécharger

FishBase pour les Amériques FishBase for the Red Sea
 FishBase pour l'Afrique FishBase for HighARCS
 FishBase pour l'Asie FishBase for Europe

Note : Les outils sans bouton sont accessibles par la page Résumé pour l'Espèce.

Informations par Thématique

Écologie tropique Cycle de vie Utilisations Divers
 Régime alimentaire Croissance Aquaculture Traités et Conv.
 Éléments du régime alimentaire Relation L-W Profils d'aquaculture CITES
 Consommation alimentaire Fréquences de longueur Introductions CMS
 Ration Recrutement Pathologies Bases de données nationales
 Prédateurs Reproduction Oigatères Noms par langage
 Maturité Traitement Collaborateurs
 Frail Ecotoxicologie Aquariums publics
 Physiologie/Comportement Fécondité Génétique Expéditions
 Métabolisme Oûts Fréquences alléiques Vidéo
 Surface branchiale Dév. des oeufs Héritabilité Timbres avec poissons
 Cerveaux Larves Otoliths Uploaded photos online
 Vision Dynamique des populations larvaires Mass conversion Editor messages
 Vitesse de nage Abundance

Des données générales et détaillées par:

- famille
- pays
- écosystème
- thématique

The screenshot shows the FishBase search page with various filters and search options. The filters are organized into sections: Information by Family, Information by Country / Island, Information by Ecosystem, Information by Topic, Tools, and References. Each section contains a list of radio buttons for selecting different criteria. The search bar at the top right allows for searching by Common Name, Scientific Name, Genus, Species, or FishBase ID. The page also includes a Glossary and an Associated Journal section.



3.1. Page de recherche

Outils

- Identification
- Clés d'identification
- Identification
- Introductions défavorables
- Introductions mondiales
- Espèces invasives
- Espèces par écosystèmes
- Graphiques
- Produits de la mer
- Shifting Baselines WP2 - Online Toolset
- Preferred algae/plants of herbivorous fishes
- Comparaison de noms
- Diagnostic pathologique
- Ma Page Poisson
- Outil de dynamique de population
- Analyse des fréquences de longueur
- Informations manquantes
- Sea Around Us
- Niv. Troph. CSISAPA
- Aquaculture FAO
- Prises FAO
- Analyses des captures
- Captures CIES
- Classification List
- Classification Tree
- Statistiques sur les poissons
- Enregistrements mondiaux
- Codes pays
- Catalogue of Life
- Collections de poissons
- Historique de collecte
- Pyramides trophiques
- Paramètres Ecopath
- AquaMaps
- Nouvelle(s) espèce(s) in FishBase
- Nouvelle(s) espèce(s) in Welt der Fische
- Nouvelle(s) Photo(s)
- Stats web
- Top 100

Search Fish Collections: (40 collections, 24,109 species, 2,339,491 records)

AMNH | ARC | AUT | ASIZ | BMNH | BPBM | CAS | CICIMAR-IPN | CSIC-ICM | GCR | IEO | ISH | KUNHM | MNHN | MRAC | MSU-IT | NM-MP | NNM | NTM | NTU | NMSM | NMMA | NMZB | NRM | NSMT | RBCM | ROM | SAJAB | SIO | SPCP | SU-DCP | UBC | USC | USNM | UPMSI | UPVMSN | XU-P | ZMH | ZMUC

Search [Reset]

By Catalog No. begins with [] (e.g. BMNH 1892.6.17.4)

Scientific Name

Genus is [] (e.g. Lates)

Species is [] (e.g. niloticus)

Name used in collection

Genus is [] (e.g. Chromis)

Species contains [] (e.g. niloticus)

By Station No. begins with [] (e.g. UBC 58-0253)

Family []

Country []

FAO Area []

Locality [] (e.g. Red Sea)

Collector [] (e.g. Kellog)

Year [] (e.g., 1903)

Survey []

Search [Reset]



Consulter les collections ichtologiques de différents musées (MRAC, MNHN, BMNH, ...)

The screenshot shows the FishBase search page with various filters and options. The 'Common Name' and 'Scientific Name' search fields are visible. Below these, there are sections for 'Information by Family', 'Information by Country / Island', 'Information by Ecosystem', and 'Information by Topic'. Each section has a list of radio buttons for selecting specific criteria. The 'Tools' section at the bottom right contains various utility buttons like 'Data Identification', 'Species Summary', etc.



3.1. Page de recherche

Références

Auteur (e.g. Randall)
[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Année

Titre (e.g. Gilbert Islands)

Source

Numéro de référence (e.g. 32 or 32, 123, 2700)

[Journaux sur les poissons](#) [Articles du CIES](#)

List of publications on fishes in [Zootaxa](#).
 You can search references also in the independent [Catalog of Fishes](#).

Associated Journal

Publish in our journal partner [Acta Ichthyologica et Piscatoria](#) the results of your primary research on fishes about growth, weight-length relationships, reproduction (maturity, fecundity, spawning), food and diet composition, introductions and range extensions for faster subsequent entry in (2011 impact factor: 0.547).

Indexed Journal

[Cybium](#) (publisher: S.F.I. Société Française d'Ichtyologie)

For journal editors: Would you wish that your journal were indexed in FishBase, please contact our [librarian](#).

[Références citant FishBase](#)

Comment citer FishBase

Pour rendre crédit aux auteurs originaux, merci de citer les données extraites de FishBase par la Référence Principale (Ref. Princ.) et/ou par la Référence des Données (Ref. Données) des enregistrements respectifs

Citer FishBase seul ainsi

Froese, R. and D. Pauly, Editors. 2014. FishBase. World Wide Web electronic publication.

Toute l'information dans FishBase est basée sur des publications scientifiques et vérifiée par des experts

The screenshot shows the FishBase search page with various filters and search options. It includes sections for 'Common Name', 'Scientific Name', 'Genus + Species', 'Information by Family', 'Information by Country / Island', 'Information by Ecosystem', and 'Information by Topic'. There are also search bars and dropdown menus for each section.

Biology

Occurs mainly in quiet waters, lakes and pools but may also occur in fast flowing rivers and in rapids (Ref. 248). Widely tolerant of extreme environmental conditions. The presence of an accessory breathing organ enables this species to breath air when very active or under very dry conditions. Remains in the muddy substrates of ponds and occasionally gulp air through the mouth (Ref. 6465). Can leave the water at night using its strong pectoral fins and spines in search of land-based food or can move into the breeding areas through very shallow pathways (Ref. 6868). A bottom feeder which occasionally feeds at the surface (Ref. 248). Forages at night on a wide variety of prey (Ref. 6868). Feeds on insects, plankton, invertebrates and fish but also takes young birds, rotting flesh and plants (Ref. 6465). Migrates to rivers and temporary streams to spawn (Ref. 34291). Also caught with dragnets. During intra-specific aggressive interactions, this species was noted to generate electric organ discharges that were monophasic, head-positive and lasting from 5-260 ms (Ref. 10479).
 Teugels, G.G., 1986

Citation	Teugels, G.G. 1986 A systematic revision of the African species of the genus <i>Clarias</i> (Pisces; Clariidae). Ann. Mus. R. Afr. Centr., Sci. Zool., 247:199 p.
DOI	http://dx.doi.org/
Paper URL	
E-mail	
Address	
Ref. No.	248
Language	English
Usage	used in part
Comments	
Remarks	
Find this reference in	Google Scholar Scirus Species used from this reference



3.2. Page de présentation de l'espèce

- Une des pages les plus importantes dans FishBase
- Mise en page standardisée
- Portail vers toute l'information d'une espèce dans FishBase
- Accessible à partir de la page de recherche, mais également à partir des listes d'écosystème ou de pays, clés d'identification, etc.



[About this page](#) | [Log out](#) | [User preferences](#) | [Citation](#) | [Feedback](#) | [Help](#) | [Feedback](#) | [Feedback](#) | [Feedback](#)

Mozambique tilapia
Oreochromis mossambicus (Peters, 1852)

[Upload your photos and videos](#)
 Photos | Slideshows | Videos | Slideshows | Videos

Classification / Names
 Common names | Synonyms | Catalog of Fishes (gen., n.s.) | ITIS | GBIF | WoRMS | FishBase | Actinopterygii (ray-finned fishes) > Perciformes (Perciformes) > Cichlidae (Cichlidae) > Pseudocrenilabridae
 Etymology: *Oreochromis*: Latin, aurum = gold + Greek, chromis = a fish, perhaps a perch (Ref. 45335).

Taxon
Oreochromis mossambicus *bassambikifit* is placed only under the genus *Oreochromis* in Echeverre (Coff ver. May 2011: Ref. 86870). It is treated here questionably a synonym of *Oreochromis mossambicus*.

Environment / Climate / Range
 Freshwater; lacustrine; benthopelagic (Ref. 51243); depth range 1 - 12 m (Ref. 57385); Tropic 17°C - 35°C (Ref. 3) | 1318 - 1875

Length at first maturity / Size / Weight / Age
 Maturity: L_w 15.4, range 6 - 28 cm
 Max length: 39.0 cm SL, male unsexed (Ref. 21), common length: 35.0 cm TL, male unsexed (Ref. 6987); max. published weight: 13 kg (Ref. 40637); max. reported age: 11 years (Ref. 164)

short description
 Dorsal vertebrae (total): 18. Dorsal soft rays (total): 10-13. Anal spines: 3. Anal soft rays: 7-12. Ventrals: 28-31. Diagonal: upper long, forward with relatively large scales, starting with 2 scales between the eyes followed by 9 scales up to the dorsal fin (Ref. 599, 1960). Adult males develop a pointed, duckbill-like snout (Ref. 52307) due to enlarged jaws, often causing the upper profile to become concave (Ref. 2, 7248, 12524, 13337, 52307), but upper profile convex in smaller specimens (Ref. 1876, 6460). Pharyngeal teeth very fine, the dentigerous area with narrow lobes, the blade is adults longer than dentigerous area, 28-31 vertebrae, 3 anal spines, 14-20 lower gill rakers, genital papilla of males simple or with a shallow distal notch, caudal fin not spines, 14-20 lower gill rakers; genital papilla of males simple or with a shallow distal notch; caudal fin not densely scaly; female and non-breeding male silvery with 2-5 mid-lateral blotches and some of a more dorsal series, breeding male black with white lower parts of head and red margins to dorsal and caudal fins (Ref. 2).

Distribution
 Africa: Lower Zambezi, Lower Shire and coastal plains from Zambezi delta to Limpopo. Occurs southwards to the Brak River in the eastern Cape and in the Transvaal in the Limpopo system (Ref. 6465). Widely introduced for aquaculture, but escaped and established itself in the wild in many countries, often outcompeting local species (Ref. 12217). Several countries report adverse ecological impact after introduction.

Biology
 Adults thrive in standing waters (Ref. 7248, 12513) inhabit reservoirs, rivers, creeks, drains, swamps and tidal creeks, commonly over mud bottoms, often in well-vegetated areas (Ref. 44894). Also found in warm weedy pools of sluggish streams, canals and ponds (Ref. 5723). More common in kind-estuarine and coastal lakes (Ref. 12693), but usually absent from permanently open estuaries and open sea (Ref. 6465) and from fast-flowing waters (Ref. 7248, 12513). Normally not found at high altitudes (Ref. 6465). Able to survive extreme reduction of temporary water bodies (Ref. 2, 27345). Highly euryhaline (Ref. 2, 2, 2, 58, 61, 6465, 12651, 12522, 12524, 13337, 27445, 55152). Grows and reproduces in fresh, brackish and seawater (Ref. 2, 21, 23, 61, 5214, 2745, 36683, 54962). Can be raised under hyper-saline conditions (Ref. 657, 44894, 52307). Tolerate low dissolved oxygen levels (Ref. 1, 23, 6465) and can utilize atmospheric oxygen when water oxygen levels drop (Ref. 61, 6465). Mainly diurnal. May form schools (Ref. 2, 4577, 44894). Omnivorous (Ref. 21, 12524). Feeds mainly on algae and phytoplankton (Ref. 4577, 7248, 12513, 12522, 12524, 13337, 36683, 44894, 52307) but also take some zooplankton, small insects and their larvae (Ref. 4577, 7248, 12524, 13337, 44894, 52307), slugs (Ref. 12524, 13337), earthworms (Ref. 12513) and aquatic macrophytes (Ref. 6465). Juveniles omnivorous/omnivorous, adults tend to be herbivorous or detritus feeders (Ref. 2, 6465, 13377). Large individuals have been reported to prey on small fishes (Ref. 2, 6465, 12513, 12522) and occasionally cannibalize their own young (Ref. 2, 6465). Exhibit considerable plasticity in their feeding habits (Ref. 6465, 13354) as well as in their reproductive biology (Ref. 13354). Polygamous (Ref. 12524, 13377), maternal mouthbrooder (Ref. 1, 5214, 12513, 13377). Reach sexual maturity at 15 centimeter length (Ref. 44894), but stunted fish may breed at 6-7 centimeters and at an age of just over 2 months (Ref. 52307). Females lay eggs (Ref. 4577). Estimated temperature range 8-42°C. Critical temperature range 17-35°C (Ref. 3), with substrate-dependent difference in temperature tolerance (Ref. 2, 23). Somewhat aggressive toward other species (Ref. 76683). Marketed fresh and frozen (Ref. 6987). Excellent palatable (Ref. 6465), with small head and large dress-out weight (Ref. 61) and fillets without small bones (Ref. 47960). Used extensively in biological, physiological and behavioural research (Ref. 7248). Translocated and introduced for aquaculture, sport fishing, stocking man-made lakes and biological control of nuisance plants and animals (Ref. 6465). Eurytopic, a most successful and viable invader (Ref. 6465).

Main reference
 Trevisan, E. 1982. Tilapia: taxonomy and speciation. p. 3-11. In R.S.V. Pullin and R.H. Lowe-McConnell (eds.), The biology and culture of tilapia. ICLARM Conf. Proc. 7.

IUCN Red List Status (Ref. 46363)
 Threat to humans:
■ Near Threatened (NT) ■ Potential pest

Human uses
 FishBase: highly commercial; aquaculture; commercial; gamefish; sea; aquarium; commercial
 FAO/Aquaculture: production; fisheries; production; species profile; publication: search | FisheriesWiki | Sea Around Us

More information

Countries	Common names	Age Size	References	Collaborators
FAO areas	Synonyms	Growth	Aquaculture	Pictures
Ecovisystems	Metabolism	Length-weight	Aquaculture profile	Stamps, Coins
Occurrences	Predators	Length-length	Streams	
Introductions	Ecotoxicology	Length-frequencies	Genetics	Cigarettes
Stocks	Reproductive	Morphometrics	Allote-Frequencies	Signet
Ecology	Maturity	Morphology	Heritability	Swim type
Diet	Spawning	Larvae	Diseases	Gill area
Food items	Fecundity	Local dynamics	Processing	Otoliths
Food consumption	Eggs	Recruitment	Mass conversion	Brains
Relative	Egg development	Abundance	Vision	

Tools
 Bio-QiTi | E-book | Field guide | Identification keys | Length-frequency wizard | Life-history tool | Point map | Classification Tree | Catch-MSY

Special reports
 Check for Aquarium maintenance | Check for Species Fact Sheets | Check for Aquaculture Fact Sheets

Download XML
 Summary page | Point data | Common names | Photos

Internet sources
 Alton (Brazins Species database) | BHL | Cfish | DOL/Diversity | Fishbase from users | Check FishWikiBot | CISTI | Catalog of Fishes (gen., sp.) | DiscoverLife | FaunaFi | Fishbase | GenBank (genome, nucleotide) | GOBASE | Google Books | Google Scholar | Google | IORA World Record | Species | National databases | Public aquaria | PubMed | RFI Identification | Science | SeaLife | Tree of Life | UBio | Wikipedia (en, source) | World Records Freshwater Fishing | Zoological Record

Estimates of some properties based on empirical models
 Phylogenetic diversity index (Ref. 82805): PD_{ij} = 0.5000 [Uniqueness, from 0.5 = low to 2.0 = high]
 Bayesian length-weight: $\mu=0.01835$ (-0.03355 - 0.07025), $b=2.98$ (2.96 - 3.00), based on LWR estimates for this species (Ref. 9245).
 Tropic Level (Ref. 69278): 2.0 = 0.0 se. Based on diet studies.
 Resilience (Ref. 69278): Medium, minimum population doubling time 1.4 - 4.4 years (K=0.2-0.5, m=1, rmax=11).
 Vulnerability (Ref. 69151): Low to moderate vulnerability (32 of 100).
 Price category (Ref. 80766): Unknown

3.2. Page de présentation de l'espèce


Information taxinomique, photo, information écologique

	À propos de cette page	Langues	User feedbacks	Citation	Uploads	Espèces associées			9
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Oreochromis mossambicus (Peters, 1852)

Mozambique tilapia

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Oreochromis mossambicus
Picture by Lovshin, L.

Classification / Names [Noms communs](#) | [Synonymes](#) | [Catalog of Fishes \(gen., sp.\)](#) | [ITIS](#) | [CoL](#) | [WoRMS](#) | [Cloffa](#)

Actinoptérygiens (poissons à nageoires rayonnées) > Perciformes (Perch-like) > Cichlidae (Cichlids) > Pseudocrenilabrinae

Etymology: *Oreochromis*: Latin, aurum = gold + Greek, chromis = a fish, perhaps a perch (Ref. 45335).

Issue
Oreochromis mossambicus bassamkhalafi is placed only under the genus *Oreochromis* in Eschmeyer (CofF ver. May 2011: Ref. 86870). It is treated here questionably a synonym of *Oreochromis mossambicus*.

Environnement / Climat / Gamme Écologie

; eau douce; saumure benthoplagique; amphidrome (Ref. 51243); profondeur 1 - 12 m (Ref. 57895).
 Tropical; 17°C - 35°C (Ref. 3); 13°S - 35°S

Length at first maturity / Taille / Poids / Âge

Maturity: L_m 15.4, range 6 - 28 cm
 Max length : 39.0 cm SL mâle / non sexé; (Ref. 21); common length : 35.0 cm TL mâle / non sexé; (Ref. 9987);
 poids max. publié: 1.1 kg (Ref. 40637); âge max. reporté: 11 années (Ref. 164)

Mozambique tilapia

Upload your photos and videos

Oreochromis mossambicus
Peters by Lovshin, L.

Classification / Names [Common names](#) | [Synonymes](#) | [Catalog of Fishes \(gen., sp.\)](#) | [ITIS](#) | [CoL](#) | [WoRMS](#) | [Cloffa](#)

Actinopterygii (ray-finned fishes) > Perciformes (Perch-like) > Cichlidae (Cichlids) > Pseudocrenilabrinae
 Etymology: *Oreochromis*: Latin, aurum = gold + Greek, chromis = a fish, perhaps a perch (Ref. 45335).

Issue
Oreochromis mossambicus bassamkhalafi is placed only under the genus *Oreochromis* in Eschmeyer (CofF ver. May 2011: Ref. 86870). It is treated here questionably a synonym of *Oreochromis mossambicus*.

Environnement / Climat / Gamme Écologie

Freshwater; lacustrine; benthoplagique; amphidrome (Ref. 51243); depth range 1 - 12 m (Ref. 57895). Tropical; 17°C - 35°C (Ref. 3); 13°S - 35°S

Length at first maturity / Size / Weight / Age

Maturity: L_m 15.4, range 6 - 28 cm
 Max length : 39.0 cm SL male / unsexed; (Ref. 21); common length : 35.0 cm TL male / unsexed; (Ref. 9987); max. published weight : 1.1 kg (Ref. 40637); max. reported age : 11 years (Ref. 164).

Short description [Taxonomy](#) | [Description](#)

Dorsal scales (total) 18 - 18. Dorsal soft rays (total) 10-13. Anal spines: 3. Anal soft rays: 7 - 12. Ventrals: 28 - 31. Diagonal: none. Forward with relatively large scales, starting with 2 scales between the eyes followed by 9 scales up to the dorsal fin (Ref. 996, 998). Anal rays become pointed, dachli-like (Ref. 42307) due to enlarged jaws, often causing the upper profile to become concave (Ref. 2, 7248, 12248, 13337, 52307), but upper profile concave in smaller specimens (Ref. 1876, 6465). Pharyngeal teeth weak. Gill rakers: the dentigerous area with narrow lobes, the blade in adults longer than dentigerous area, 28-33 ventrals, 1 anal spine, 14-20 lower gill rakers; genital papilla of males simple or with a shallow distal notch; caudal fin not spiny, 14-20 lower gill rakers; genital papilla of males simple or with a shallow distal notch; caudal fin not densely scaled; female and non-brooding male silvery with 2-5 mid-lateral blotches and some of obscure dorsal series; brooding male black with white lower parts of head and red margins to dorsal and caudal fins (Ref. 2).

Distribution [Diversity](#) | [FAO areas](#) | [Invasions](#) | [Aquaculture](#) | [Reservoirs](#) | [Reservoirs](#) | [Reservoirs](#)

Africa: Lower Zambezi, Lower Shire and coastal plain from Zambezi delta to Alagoas River; southern to the Brak River in the eastern Cape and in the Transvaal in the Limpopo system (Ref. 6465). Widely introduced for aquaculture, but escaped and established itself in the wild in many countries, often displacing local species (Ref. 12237). Several countries report adverse ecological impact after introduction.

Biology [Glossary](#) | [Search](#)

Adults thrive in standing waters (Ref. 7248, 12503) inhabit reservoirs, rivers, swamps, drains, streams and tidal creeks; commonly over mud bottoms, often in well-oxygenated areas (Ref. 4498). Also found in warm weedy pools of sluggish streams, canals, and ponds (Ref. 5723). Most common in floodplain areas and coastal lakes (Ref. 1269), but usually absent from permanently open estuaries and open sea (Ref. 6465) and from fast-flowing waters (Ref. 7248, 12503). Normally not found at high altitudes (Ref. 6465). Able to survive extreme reduction of temporary water bodies (Ref. 2, 2345). Highly euryhaline (Ref. 2, 23, 58, 61, 6465, 12503, 12522, 12524, 13337, 23445, 55152). Grows and reproduces in fresh, brackish and seawater (Ref. 2, 23, 23, 61, 5234, 27445, 36683, 54962). Can be reared under hyper-saline conditions (Ref. 4557, 44939, 52307). Tolerant low dissolved oxygen levels (Ref. 1, 23, 6465) and can utilize atmospheric oxygen when water oxygen levels drop (Ref. 61, 6465). Mainly diurnal. May form schools (Ref. 4557, 44939). Omnivorous (Ref. 21, 12524). Feeds mainly on algae and phytoplankton (Ref. 4557, 7248, 12499, 12522, 12524, 13337, 36683, 44939, 52307), but also take some zooplankton, small insects and their larvae (Ref. 4557, 7248, 12524, 13337, 44939, 52307), slugs (Ref. 12524, 13337), earthworms (Ref. 13337), aquatic macrophytes (Ref. 6465). Juveniles carnivorous/omnivorous, adults tend to be herbivorous or detritus feeders (Ref. 2, 6465, 13337). Large individuals have been reported to prey on small fish (Ref. 2, 6465, 12503, 12522), and occasionally cannibalize their own young (Ref. 2, 6465). Exhibit coralline plasticity in their feeding habits (Ref. 6465, 11544) as well as in their reproductive biology (Ref. 1544). Polygamous (Ref. 12524, 13337), maternal mouthbrooder (Ref. 1, 5234, 12524, 13337). Reach sexual maturity at 15 centimeter length (Ref. 44939), but started fish may breed at 8 centimeters and at age of just over 2 months (Ref. 52307). Recruits high (Ref. 65152). Estimated temperature range 8-42°C at temperature range 17-35°C (Ref. 3) with salinity dependent difference in temperature tolerance (Ref. 2, 23). Somewhat aggressive toward other species (Ref. 76653). Marketed fresh and frozen (Ref. 996). Excellent palatability (Ref. 6465), with small head and large dress-out weight (Ref. 61) and firm white small bones (Ref. 47960). Used extensively in biological, physiological and behavioral research (Ref. 7248). Translocated and introduced for aquaculture, sport fishing, stocking man-made lakes and biological control of nuisance plants and animals (Ref. 6465). Eurytopic; a most successful and viable invader (Ref. 6465).

Main reference [United your references](#) | [References](#) | [Coordinator](#) | [Kubandira](#), Sven O. | [Collaborators](#)

Trevisan, R., 1982. Tilapia taxonomy and speciation, p. 3-11. In R.S.V. Pullin and R.H. Lowe-McConnell (eds.), The biology and culture of tilapia. ICLARM Conf. Proc. 7.

IUCN Red List Status (Ref. 6465) **Threat to humans**

■ Near Threatened (NT) ■ Potential pest

Human uses

Fisheries: highly ornamental; aquaculture: commercial; gamefish: sea aquarism: commercial
 FAO/Aquaculture: production; fisheries: production; species profile: publication: search | FisheriesWiki | Sea Around Us

More information

Common names	Synonyms	Age/Size	References	Collaborators
FAO area	Common names	Growth	Aquaculture	Pictures
Ecology	Metabolism	Length-weight	Aquaculture profile	Stamps
Life history	Predators	Length-length	Stress	Coins
Life history	Reproduction	Length-frequencies	Allies/frequencies	Genetics
Life history	Reproduction	Morphometrics	Heritability	Spines
Life history	Reproduction	Maturity	Heritability	Swim type
Life history	Reproduction	Spawning	Diseases	Gill area
Life history	Reproduction	Larval dynamics	Processing	Oxidative
Life history	Reproduction	Recruitment	Mass conversion	Brains
Life history	Reproduction	Egg development	Abundance	Vision

Tools

Bio-Quiz | E-book | Field guide | Identification keys | Length-frequency wizard | Life-history tool | Point map | Classification Tree | Catch-MSY

Special reports

Check for Aquarium maintenance | Check for Species Fact Sheets | Check for Aquaculture Fact Sheets

Download XML

Summary page | Point data | Common names | Photos

Internet sources

Algae Browser Species database | BHL | Cfish | Cfish | DOL/Diversity | Wikispecies from users | Check Fish/Water/CSTI | Catalog of Fishes (gen., sp.) | DiscoverLife | FaunaFi | FishBase | Oreochromis (genus, mioschloids) | GORBASE | Google Books | Google Scholar | Google | IOWA World Record | Species | National Databases | Public aquariums | PubMed | RFI Identification | Science | SeaLifeBase | Tree of Life | Ullrich | Wikipedia (en, source) | World Records Freshwater Fishing | Zoological Record

Estimates of some properties based on empirical models

Phylogenetic diversity index (Ref. 82805): PD₃₁ = 0.5000 [Uniqueness, from 0.5 = low to 2.0 = high]

Bayesian length-weight: $\mu=0.01835 (-0.03355 - 0.07025)$, $b=2.98 (2.96 - 3.00)$, based on LWR estimates for this species (Ref. 9245).

Trophic Level (Ref. 69278): 2.0 ± 0.0 se; Based on diet studies.

Resilience (Ref. 69278): Medium, minimum population doubling time 1.4 - 4.4 years (K=0.2-0.5; $\text{max}(\text{resilience})=1$).

Vulnerability (Ref. 59153): Low to moderate vulnerability (32 of 100).

Price category (Ref. 80766): Unknown.



3.2. Page de présentation de l'espèce

Description synthétique

Morphologie | Morphométrie

Épines dorsales (Total): 15 - 18; Rayons mous dorsaux (Total): 10-13; Épines anales 3; Rayons mous anaux: 7 - 12; Vertèbres: 28 - 31. Diagnosis: snout long; forehead with relatively large scales, starting with 2 scales between the eyes followed by 9 scales up to the dorsal fin (Ref. 3058, 3060). Adult males develop a pointed, duckbill-like snout (Ref. 52307) due to enlarged jaws, often causing the upper profile to become concave (Ref. 2, 7248, 12524, 13337, 52307), but upper profile convex in smaller specimens (Ref. 1870, 6460). Pharyngeal teeth very fine, the dentigerous area with narrow lobes, the blade in adults longer than dentigerous area; 28-31 vertebrae; 3 anal spines; 14-20 lower gill-rakers; genital papilla of males simple or with a shallow distal notch; caudal fin not densely scaled; female and non-breeding male silvery with 2-5 mid-lateral blotches and some of a more dorsal series; breeding male black with white lower parts of head and red margins to dorsal and caudal fins (Ref. 2).

Distribution

Pays | Zones FAO | Écosystèmes | Occurrences | Point map | Introductions | Faunafri

Africa: Lower Zambezi, Lower Shiré and coastal plains from Zambezi delta to Algoa Bay. Occurs southwards to the Brak River in the eastern Cape and in the Transvaal in the Limpopo system (Ref. 6465). Widely introduced for aquaculture, but escaped and established itself in the wild in many countries, often outcompeting local species (Ref. 12217). Several countries report adverse ecological impact after introduction.

Biologie

Glossaire

chercher (ex. epilentic)

Adults thrive in standing waters (Ref. 7248, 12501). Inhabit reservoirs, rivers, creeks, drains, swamps and tidal creeks; commonly over mud bottoms, often in well-vegetated areas (Ref. 44894). Also found in warm weedy pools of sluggish streams, canals, and ponds (Ref. 5723). Most common in blind estuaries and coastal lakes (Ref. 32693), but usually absent from permanently open estuaries and open sea (Ref. 6465) and from fast-flowing waters (Ref. 7248, 12501). Normally not found at high altitudes (Ref. 6465). Able to survive extreme reduction of temporary water bodies (Ref. 2, 27445). Highly euryhaline (Ref. 2, 3, 23, 58, 61, 6465, 12501, 12522, 12524, 13337, 27445, 55352). Grow and reproduce in fresh-, brackish and seawater (Ref. 2, 21, 23, 61, 5214, 27445, 36683, 54362). Can be reared under hyper-saline conditions (Ref. 4537, 44894, 52307). Tolerate low dissolved oxygen levels (Ref. 3, 23, 6465) and can utilise atmospheric oxygen when water oxygen levels drop (Ref. 61, 6465). Mainly diurnal. May form schools (Ref. 3, 4537, 44894). Omnivorous (Ref. 21, 12524), feed mainly on algae and phytoplankton (Ref. 4537, 7248, 12501, 12522, 12524, 13337, 36683, 44894, 52307) but also take some zooplankton, small insects and their larvae (Ref. 4537, 7248, 12501, 12522, 12524, 13337, 36683, 44894, 52307), shrimps (Ref. 12524, 13337), earthworms (Ref. 12501) and aquatic macrophytes (Ref. 6465). Juveniles carnivorous/omnivorous, adults tend to be herbivorous or detritus feeders (Ref. 2, 6465, 13517). Large individuals have been reported to prey on small fishes (Ref. 1, 5214, 12524, 13337). Reach sexual maturity at 6 centimeter length (Ref. 44894), but stunted fish may breed at 6-7 centimeters and at an age of just over 2 months (Ref. 52307). Fecundity high (Ref. 57960). Extended temperature range 8-42 °C, natural temperature range 17-35°C (Ref. 3), with salinity-dependent difference in temperature tolerance (Ref. 2, 23). Somewhat aggressive toward other species (Ref. 6465). Marketed fresh and frozen (Ref. 9987). Excellent palatability (Ref. 6465), with small head and large dress-out weight (Ref. 61), and filets without small bones (Ref. 57960). Used extensively in biological, physiological and behavioural research (Ref. 7248). Translocated and introduced for aquaculture, sport fishing, stocking man-made lakes and biological control of nuisance plants and animals (Ref. 6465). Eurytopic; a most successful and vagile invader (Ref. 6465).



Oreochromis mossambicus (Peters, 1852)

Mozambique tilapia

Upload your photos and videos

Common names | Synonyms | Catalog of Fishes (cat. 661170) | Cui. 11 (2011) | Clupeo | Oreochromis | Oreochromis

Classification / Names

Common names | Synonyms | Catalog of Fishes (cat. 661170) | Cui. 11 (2011) | Clupeo | Oreochromis | Oreochromis

French: Oreochromis mossambicus

English: Mozambique tilapia

German: Mosambiktilapia

Spanish: Tilapia mozambiqueña

Portuguese: Tilápia mozambicana

Classification / Names

Common names | Synonyms | Catalog of Fishes (cat. 661170) | Cui. 11 (2011) | Clupeo | Oreochromis | Oreochromis

French: Oreochromis mossambicus

English: Mozambique tilapia

German: Mosambiktilapia

Spanish: Tilapia mozambiqueña

Portuguese: Tilápia mozambicana

Environment / Climate / Range

Freshwater, brackish, euryhaline; amphibious (Ref. 52307); depth range 1 - 12 m (Ref. 57895). Tropic 17°C - 35°C (Ref. 3), 13.9 - 35°C

Length at first maturity / Size / Weight / Age

Maturity: Lw 15.4, stage 6 - 28 cm

Max length: 39.0 cm SL, male (assess), (Ref. 21), common length: 35.0 cm TL, male (assess), (Ref. 6465); max. published weight: 1.3 kg (Ref. 40073), max. reported age: 33 years (Ref. 168)

Short description

Dorsal scales (total): 15 - 18. Dorsal soft rays (total): 10-13. Anal spines: 3. Anal soft rays: 7 - 12. Vertebrae: 28 - 31. Diagnosis: snout long; forehead with relatively large scales, starting with 2 scales between the eyes followed by 9 scales up to the dorsal fin (Ref. 3058, 3060). Adult males develop a pointed, duckbill-like snout (Ref. 52307) due to enlarged jaws, often causing the upper profile to become concave (Ref. 2, 7248, 12524, 13337, 52307), but upper profile convex in smaller specimens (Ref. 1870, 6460). Pharyngeal teeth very fine, the dentigerous area with narrow lobes, the blade in adults longer than dentigerous area; 28-31 vertebrae; 3 anal spines; 14-20 lower gill-rakers; genital papilla of males simple or with a shallow distal notch; caudal fin not densely scaled; female and non-breeding male silvery with 2-5 mid-lateral blotches and some of a more dorsal series; breeding male black with white lower parts of head and red margins to dorsal and caudal fins (Ref. 2).

Distribution

Africa: Lower Zambezi, Lower Shiré and coastal plains from Zambezi delta to Algoa Bay. Occurs southwards to the Brak River in the eastern Cape and in the Transvaal in the Limpopo system (Ref. 6465). Widely introduced for aquaculture, but escaped and established itself in the wild in many countries, often outcompeting local species (Ref. 12217). Several countries report adverse ecological impact after introduction.

History

Originary

Conservation

Adults thrive in standing waters (Ref. 7248, 12501). Inhabit reservoirs, rivers, creeks, drains, swamps and tidal creeks; commonly over mud bottoms, often in well-vegetated areas (Ref. 44894). Also found in warm weedy pools of sluggish streams, canals, and ponds (Ref. 5723). Most common in blind estuaries and coastal lakes (Ref. 32693), but usually absent from permanently open estuaries and open sea (Ref. 6465) and from fast-flowing waters (Ref. 7248, 12501). Normally not found at high altitudes (Ref. 6465). Able to survive extreme reduction of temporary water bodies (Ref. 2, 27445). Highly euryhaline (Ref. 2, 3, 23, 58, 61, 6465, 12501, 12522, 12524, 13337, 27445, 55352). Grow and reproduce in fresh-, brackish and seawater (Ref. 2, 21, 23, 61, 5214, 27445, 36683, 54362). Can be reared under hyper-saline conditions (Ref. 4537, 44894, 52307). Tolerate low dissolved oxygen levels (Ref. 3, 23, 6465) and can utilise atmospheric oxygen when water oxygen levels drop (Ref. 61, 6465). Mainly diurnal. May form schools (Ref. 3, 4537, 44894). Omnivorous (Ref. 21, 12524), feed mainly on algae and phytoplankton (Ref. 4537, 7248, 12501, 12522, 12524, 13337, 36683, 44894, 52307), shrimps (Ref. 12524, 13337), earthworms (Ref. 12501) and aquatic macrophytes (Ref. 6465). Juveniles carnivorous/omnivorous, adults tend to be herbivorous or detritus feeders (Ref. 2, 6465, 13517). Large individuals have been reported to prey on small fishes (Ref. 1, 5214, 12524, 13337). Reach sexual maturity at 6 centimeter length (Ref. 44894), but stunted fish may breed at 6-7 centimeters and at an age of just over 2 months (Ref. 52307). Fecundity high (Ref. 57960). Extended temperature range 8-42 °C, natural temperature range 17-35°C (Ref. 3), with salinity-dependent difference in temperature tolerance (Ref. 2, 23). Somewhat aggressive toward other species (Ref. 6465). Marketed fresh and frozen (Ref. 9987). Excellent palatability (Ref. 6465), with small head and large dress-out weight (Ref. 61), and filets without small bones (Ref. 57960). Used extensively in biological, physiological and behavioural research (Ref. 7248). Translocated and introduced for aquaculture, sport fishing, stocking man-made lakes and biological control of nuisance plants and animals (Ref. 6465). Eurytopic; a most successful and vagile invader (Ref. 6465).

More references

Tranava, R. 1982. Tilapia taxonomy and speciation. p. 3-11. In R.S.V. Pullin and R.H. Lowe-McConnell (eds.), The biology and culture of tilapia. ICLARM Conf. Proc. 7.

IACR Red List Status (Ref. 60636)

Threat to humans

Use Threatened (NT)

Potential pest

Human uses

Fisheries: highly commercial; aquaculture; commercial; gamefish; live; aquaria; commercial

FAO/Aquaculture: production; fisheries: production; species profile; public use; search | FisheriesWiki | Sea Around Us

More information

Common names | Synonyms | Age Size | References | Collaborators

FAO area | Growth | Aquaculture | Pictures

Ecosystems | Metabolism | Length-weight | Aquaculture profile | Stamps, Coins

Occurrences | Predators | Length-weight | Genetics | Ciguatera

Introductions | Ecotoxicology | Life | Toxicology | Allergic responses | Ciguatera

Stocks | Reproductive | Morphology | Heritability | Swim type

Ecology | Maturity | Reproductive | Diseases | Gill area

Diet | Food items | Larval dynamics | Processing | Mollusca

Food consumption | Eggs | Recruitment | Mass conversion | Brains

Status | Life span | Abundance | Vision

Tools

Bio-Quiz | E-book | Red List guide | Identification keys | Length-frequency wizard | Life-history tool | Point map | Classification | Catch-MTV

Special reports

Check for Aquarium maintenance | Check for Species Fact Sheets | Check for Aquaculture Fact Sheets

Download XML

Summary page | Point data | Common names | Photos

Internet sources

Alma Mater Species database | BHL | Clupeo | DOL/DIVERSITY | Wikispecies | Wikidata | Check Fish/Water/Catch | CISTI | Catalog of Fishes (cat. 661170) | DiscoverLife | FaunaFi | FishBase | Oreochromis (genome, microdata) | GBIF | Google Books | Google Scholar | Google | IORA World Record | iSpecies | National Geographic | Public square | PubMed | RFD Identification | Science | SeaLife | Tree of Life | UBio | Wikipedia (en, es, fr, it, pt, zh) | World Records Freshwater Fishing | Zoological Record

Estimates of some properties based on empirical models

Phylogenetic diversity index (Ref. 82805): PDI = 0.5000 [Uniqueness, from 0.5 = low to 2.0 = high]

Bayesian length-weight: $w = 0.01835 \cdot (-0.0355 \cdot 0.07025) \cdot b \cdot 298 (2.96 - 3.00)$, based on LWR estimates for this species (Ref. 9245)

Trophic level (Ref. 69278): 2.0 = 0 to 5. Based on diet studies

Resilience (Ref. 69278): Medium, minimum population doubling time 1.4 - 4.4 years (K=0.2-0.5, m=1, max=11)

Vulnerability (Ref. 5913): Low to moderate vulnerability (2 of 100)

Price category (Ref. 80766): Unknown

3.2. Page de présentation de l'espèce

Life cycle and mating behavior Maturité | Reproduction | Frai | Œufs | Fécondité | Larves

Spawns at the edge of the littoral terrace of lakes (Ref. 1, 2, 87, 6465), in sandy or muddy bottoms (Ref. 57425). Displays a lek mating system; territorial males establish breeding territories where they dig spawning pits, assume a dark coloration, defend a breeding territory and actively court females; sneaking males intrude into nests during a spawning episode, exhibiting quivering behavior which is usually an indicator of sperm release; sneaking is predominantly performed by subordinate males, which may adopt pseudo-female behavior (Ref. 57425). Only territorial males produce sounds, during all phases of courtship but especially during the late stages, including spawning (Ref. 49830). Territorial male excavates and defends a basin-shaped pit in the center of his territory, where female deposits 100-1700(1800) eggs (Ref. 44894, 52307). Eggs and milt are sucked up by the female (Ref. 2, 44894). Fertilization is reported to sometimes occur in the mouth of the female (Ref. 6028). Females incubate eggs alone (Ref. 12501, 52307). It is possible, albeit rare, that males take up some eggs after spawning (Ref. 2, 5726, 52307, 57895), but they almost always eat them soon after (Ref. 52307). Females school together while mouthbrooding (Ref. 40035), they cease to feed and subsist on food reserves stored in their body (Ref. 1). Females may spawn a full clutch with just one male, or may spawn with several different males in a series (Ref. 52307). Water is circulated over the eggs by chewing movements of the jaws (Ref. 12501, 12522). Fry hatch in the female's mouth after 3-5 days (Ref. 2, 12501, 12522, 44894, 52307), depending on the temperature (Ref. 52307). The young are released from the mouth in 10-14 days, but remain near the female and enter the mouth if threatened until about 3 weeks old (Ref. 2, 44894, 52307). Fry and juveniles shoal in shallow water (Ref. 6465, 7248, 57895) where they feed during the day, and retreat to deep water at night (Ref. 87, 6465). Females raise multiple broods during a season (Ref. 7248, 57895).

Référence principale Upload your references | Références | Coordinateur : Kullander, Sven O. | Collaborateurs

Trewavas, E., 1982. Tilapia: taxonomy and speciation. p. 3-13. In R.S.V. Pullin and R.H. Lowe-McConnell (eds.) The biology and culture of tilapia. ICLARM Conf. Proc. 7. (Ref. 1)

Statut dans la liste rouge de l'IUCN (Ref. 96402) CITES (Ref. 94142)

Quasi-menacé (NT) Not Evaluated
Menace pour l'homme
Potential pest

Utilisations par l'homme

Pêcheries: hautement commercial; Aquaculture: commercial; pêche sportive: oui; Aquarium: Commercial
FAO(Aquaculture: production; pêcheries: production, species profile; publication : search) | FisheriesWiki | Sea Around Us

Plus d'informations

Pays	Noms communs	Taille/Âge	Références	Collaborateurs
Zones FAO	Synonymes	Croissance	Aquaculture	Images
Écosystèmes	Métabolisme	Longueur-poids	Profil d'aquaculture	Stamps, Coins
Occurrences	Prédateurs	Longueur-longueur	Souches	Sons
Introductions	Écotoxicologie	Fréquences de	Génétique	Ciguatera
Stocks	Reproduction	longueurs	Fréquences alléliques	Vitesse
Écologie	Maturité	Morphométrie	Héritabilité	Type de nage
Régime alimentaire	Frai	Morphologie	Pathologies	Surface branchiale
Éléments du régime alimentaire	Fécondité	Larves	Traitement	Otolithes
Consommation alimentaire	Œufs	Dynamique des populations larvaires	Mass conversion	Cerveaux
Ration	Développement de l'œuf	Recrutement	Vision	
		Abondance		

Oreochromis mossambicus (Peters, 1852)
Morambique tilapia

Upload your photos and videos
References: Photos, Cases, Questionnaires

Classification / Names Common names | Synonyms | Catalog of Fishes (spec. 661170) | GBIF | WoRMS | FishBase | Actinopterygii (ray-finned fishes) > Perciformes (Perciformes) > Cichlidae (Cichlidae) > Pseudocrenilabrus
Etymology: Oreochromis: Latin, aurum = gold + Greek, chroma = a fish, perhaps a perch (Ref. 45137).

Taxon Oreochromis mossambicus *hazardsbaitfish* is placed into the genus *Oreochromis* in Echaravary (Coff' ver. May 2011: Ref. 66870). It is treated here questionably a synonym of *Oreochromis mossambicus*.

Environment / Climate / Range Freshwater; brackish; benthopelagic; amphibious (Ref. 51243); depth range: 1 - 12 m (Ref. 57895). Tropic 1°C - 35°C (Ref. 1), 13.8 - 34.9

Length at first maturity / Size / Weight / Age Maturity: Lw: 15.4, age: 6 - 28 mo
Max length: 39.0 cm SL, male unsexed (Ref. 21); common length: 35.0 cm TL, male unsexed (Ref. 6987); max. published weight: 1.1 kg (Ref. 40037); max. reported age: 11 years (Ref. 164)

Short description Dorsal series (total): 15 - 18. Dorsal soft rays (total): 10-13. Anal spines: 3. Anal soft rays: 7 - 12. Vertebrae: 28 - 31. Diagnostic: small, forehead with relatively large scales, starting with 2 scales between the eyes followed by 9 scales up to the dorsal fin (Ref. 57895, 5090). Adult males develop a pointed, duckbill-like snout (Ref. 52307) due to enlarged jaws, often causing the upper profile to become concave (Ref. 2, 7248, 12524, 11337, 52307), but upper profile convex in smaller specimens (Ref. 187), 6465. Pharyngeal teeth very fine, the dentigerous area with narrow lobes, the blade in adults longer than dentigerous area, 28-33 vertebrae, 3 anal spines, 14-20 lower gill rakers, genital papilla of males simple or with a shallow distal notch, caudal fin not deeply scaled, female and non-brooding male silvery with 2 mid-lateral blotches and some of a more dorsal 5, brooding male black with white lower parts of head and red margins to dorsal and caudal fins (Ref. 2).

Habitat Africa: L. Ag. Zambesi, Lower third and central plains from Zambia delta to Angola. Occurs southwards to the Bank Bâ in the eastern Cape and in the Transvaal in the Limpopo system (Ref. 6465). Widely introduced for agriculture, it escaped and established itself in the wild in many countries, often outcompeting local species (Ref. 122). Overall countries report adverse ecological impact after introduction.

Biology **Glossary** **Search**

Adults thrive in standing waters (Ref. 7248, 12501) inhabit reservoirs, rivers, creeks, drains, swamps and tidal creeks; commonly over mud bottoms, often in well-vegetated areas (Ref. 44894). Also found in warm weedy pools of sluggish streams, canals and bays (Ref. 5723). Most common in kind reservoirs and coastal lakes (Ref. 5260), but usually absent from permanently open estuaries and open sea (Ref. 6465) and from fast-flowing waters (Ref. 7248, 12501). Normal size found at high altitudes (Ref. 6465). Able to survive extreme reduction of temporary water bodies (Ref. 2, 64). Highly euryhaline (Ref. 2, 2, 25, 58, 61, 6465, 12501, 12522, 12524, 13337, 27445, 55152). Grow and reproduce in fresh, brackish and seawater (Ref. 2, 21, 23, 91, 5234, 27445, 36683, 54562). Can be reared mainly under saline conditions (Ref. 557, 44894, 52307). Tolerate low dissolved oxygen levels (Ref. 1, 23, 6465) and can tolerate atmospheric oxygen when water oxygen levels drop (Ref. 61, 6465). Mainly diurnal. May form schools (Ref. 1, 537, 44894). Omnivorous (Ref. 21, 12524). Feed mainly on algae and phytoplankton (Ref. 457, 7248, 12501, 2522, 1254, 13337, 36683, 44894, 52307) but also take some zooplankton, small insects and their larvae (Ref. 2, 7248, 12524, 13337, 44894, 52307), slugs (Ref. 12524, 13337), earthworms and other invertebrates (Ref. 6465). Juveniles carnivorous/omnivorous, adults tend to be herbivorous or detritus feeders (Ref. 2, 6465, 13337). Large cannibalistic first-ova young (Ref. 2, 6465). Exhibit considerable plasticity in feeding habits (Ref. 6465, 11354) as well as in their reproductive biology (Ref. 1354). Polygamous (Ref. 1, 13337, 1337), maternal mouthbrooder (Ref. 1, 514, 12514, 1337). Reach sexual maturity at 15 centimeters (Ref. 44894), but standard fish may breed at 6-7 centimeters and at an age of just over 2 months (Ref. 52307). Sexually high (Ref. 69152). Estimated temperature range 17-32°C; actual temperature range 17-32°C (Ref. 1). A highly-dependent difference in temperature tolerance (Ref. 2, 23). Somewhat aggressive toward other species (Ref. 7665). Marketed fresh and frozen (Ref. 997). Excellent palatability (Ref. 6465), with small head and large breast-out weight (Ref. 61) and even without small bones (Ref. 47566). Used extensively in aquaculture, physiological and behavioural research (Ref. 7248). Translocated and introduced for agriculture, sport fish, stocking main-made lakes and biological control of nuisance plants and animals (Ref. 6465). Eurytopic, a cool-temperate annual invader (Ref. 6465).

Main reference Upload your references | References | Coordinator : Kullander, Sven O. | Collaborateurs

Trewavas, E., 1982. Tilapia: taxonomy and speciation. p. 3-13. In R.S.V. Pullin and R.H. Lowe-McConnell (eds.) The biology and culture of tilapia. ICLARM Conf. Proc. 7.

IUCN Red List Status (Ref. 96363) **Threat to humans**

Not Evaluated **Potential pest**

Human uses Fisheries: highly commercial; aquaculture: commercial; gamefish: yes; aquarium: commercial
FAO(Aquaculture: production; fisheries: production, species profile; publication : search) | FisheriesWiki | Sea Around Us

More information

Common names	Synonyms	Age Size	References	Collaborateurs
FAO area	Common names	Growth	Aquaculture	Pictures
Ecovisitors	Metabolism	Length-weight	Aquaculture profile	Stamps, Coins
Occurrences	Producers	Length-length	Streams	Images
Introductions	Ecotoxicology	Length-frequencies	Genetics	Ciguatera
Stocks	Reproduction	Morphometrics	Allergy-frequencies	Spines
Ecology	Maturity	Morphology	Heritability	Swim type
Diet	Spawning	Larvae	Diseases	Gill area
Food items	Feecndity	Local dynamics	Processing	Otoliths
Food consumption	Eggs	Recruitment	Mass conversion	Brains
Rate:	Egg development	Abundance	Vision	

Bio Quiz | E-book | Field guide | Identification keys | Length-freqeency wizard | Life-history tool | Download | Classification Tree | Catch-MV?

Special reports
Check for Aquarium maintenance | Check for Species Fact Sheets | Check for Aquaculture Fact Sheets

Download XML
Summary page | Point data | Common names | Images

Internet sources

Atlas (Breasts) [View all](#) | Atlas (Clubs) | ICL|Diversity | Wikisites from users | Check FishWatch | CISTI | FishBase | FishBase | FishBase | DiscoverLife | Funafiri | FishBase | GenBank | GenBank | GenBank | GenBank | Google Books | Google Scholar | Google | IORA World Record | Species | National Data | Publications | PubMed | RFD Identification | Species | Seafilebase | Tree of Life | Umm | Wikipedia | World Records Freshwater Fishing | Zoological Record

Estimates of some properties based on empirical models
Phylogenetic diversity index (Ref. 82805): PDI₀ = 0.5000 [Uniqueness, from 0.5 = low to 2.0 = high]
Bayesian length-weight: $\mu=0.01835$ (-0.03355 - 0.07025), $b=2.98$ (2.96 - 3.00), based on LWR estimates for this species (Ref. 93245)
Trophic Level (Ref. 69278): 2.0 \pm 0.0 se, Based on diet studies
Resilience (Ref. 69278): Medium, minimum population doubling time 1.4 - 4.4 years ($K=0.2-0.5$, $m=1$, $max=1$)
Vulnerability (Ref. 95153): Low to moderate vulnerability (32 of 100)
Price category (Ref. 80766): Unknown



3.2. Page de présentation de l'espèce

Classification / Names
 Common names | Synonyms | Catalog of Fishes (gen., 6611 OTS) | Cui, 1 (month) | Cui et al.
 Actinopterygii (ray-finned fishes) > Perciformes (Perciformes) > Cichlidae (Cichlidae) > Pseudocrenilabridae
 Etymology: *Oreochromis*: Latin, aurum = gold + *chromis*, chromis = a fish, perhaps a perch (Ref. 45315).

Notes
Oreochromis mossambicus *burrus*(Boulenger) is placed only under the genus *Oreochromis* in Eschmeyer (COFF ver. May 2011; Ref. 86870). It is treated here questionably a synonym of *Oreochromis mossambicus*.

Environment / Climate / Range
 Freshwater; brackish; benthopelagic; amphidromous (Ref. 51243); depth range: 1 - 12 m (Ref. 57895). Tropic 17°C - 35°C (Ref. 3) 1318, 1878.

Length at first maturity / Size / Weight / Age
 Maturity: Lw: 15.4, range 6 - 28 cm
 Max length: 39.0 cm SL, male/sexed, (Ref. 21), common length: 35.0 cm TL, male/sexed, (Ref. 9987), max. published weight: 13 kg (Ref. 40673), max. reported age: 11 years (Ref. 164)

short description
 Dorsal scales (total): 15 - 18. Dorsal soft rays (total): 10-13. Anal spines: 3. Anal soft rays: 7 - 12. Vertebrae: 28 - 31. Diagnostic: snout long, forehead with relatively large scales, starting with 2 scales between the eyes followed by 9 scales up to the dorsal fin (Ref. 5956, 5960). Adult males develop pointed, duckbill-like snout (Ref. 42307) due to enlarged jaws, often causing the upper profile to become concave (Ref. 2, 7248, 12524, 13137, 52307), but upper profile convex in smaller specimens (Ref. 1878, 6460). Pharyngeal teeth very fine, the dentigerous area with narrow lobes, the blade in adults longer than dentigerous area, 28 - 31 vertebrae, 3 anal spines, 14-20 lower gill rakers, genital papilla of males simple or with a shallow distal notch, caudal fin not densely scaled, female and non-brooding male silvery with 2-5 mid-lateral blotches and some of a more dorsal series, brooding male black with white lower parts of head and red margins to dorsal and caudal fins (Ref. 2).

Distribution
 Origin: Lower Zambezi, Lower Shire and coastal plain from Zambezi delta to Alagoas. Occurs southwards to the Bahr River in the eastern Cape and in the Transvaal in the Limpopo system (Ref. 6465). Widely introduced for aquaculture, but escaped and established itself in the wild in many countries, often outcompeting local species (Ref. 12217). Several countries report adverse ecological impact after introduction.

Biology
 Adults thrive in standing waters (Ref. 7248, 12503) inhabit reservoirs, rivers, creeks, drains, swamps and tidal creeks, common over mud bottoms, often in well-vegetated areas (Ref. 44894). Also found in warm weedy pools of sluggish streams, canals and ponds (Ref. 5723). Most common in kind extensive and coastal lakes (Ref. 5289), but also absent from permanently open estuaries and open sea (Ref. 6465) and from fast-flowing waters (Ref. 79, 12501). Normally not found at high altitudes (Ref. 6465). Able to survive extreme reduction of temporary water bodies (Ref. 2, 27415). Highly euryhaline (Ref. 2, 2, 58, 61, 6466, 12501, 12522, 12524, 13317, 2, 55152). Grows and reproduces in fresh, brackish and seawater (Ref. 2, 2, 23, 61, 5214, 2748, 36883, 5452, 55152). Can be reared under hyper-saline conditions (Ref. 4557, 44894, 52307). Tolerates low dissolved oxygen levels (Ref. 1, 23, 6465) and can utilize atmospheric oxygen when water oxygen levels drop (Ref. 61, 6465). Mainly diurnal. May form schools (Ref. 1, 4577, 44894). Omnivorous (Ref. 21, 12524). Feed mainly on algae and phytoplankton (Ref. 4577, 7248, 12501, 12522, 12524, 13317, 36883, 44894, 52307), but also take some zooplankton, small insects and their larvae (Ref. 4577, 7248, 12524, 13137, 44894, 52307), slugs (Ref. 12524, 13137), earthworms (Ref. 2, 6465), and aquatic macrophytes (Ref. 6465). Invertebrates carnivorous/omnivorous, adults tend to be herbivorous or detritus feeders (Ref. 2, 6465, 13137). Large individuals feed more frequently on soft-bodied prey (Ref. 12524, 13137). Larvae are omnivorous and feed on algal diatoms as well as on their reproductive bodies (Ref. 13544). Polygamous (Ref. 12524, 13137), maternal mouthbrooder (Ref. 1, 518, 12524, 13137). Each sexual maturity at 16 centimeter length (Ref. 44894), but stunted fish may breed at 6-7 centimeters and at an age of just over 2 months (Ref. 52307). Frequently high (Ref. 61552). Estimated temperature range: 17-35°C. Temperature range: 17-35°C (Ref. 3), with salinity-dependent difference in temperature tolerance (Ref. 4, 23). Somewhat aggressive toward other species (Ref. 76683). Marketed fresh and frozen (Ref. 9987). Escapes suitability (Ref. 6465), with small head and large breast and weight (Ref. 61) and fins without small hook (Ref. 47960). Used extensively in biological, physiological and behavioral research (Ref. 7248). Translocated and introduced for aquaculture, sport fishing, stocking main water lakes and biological control of insects and animals (Ref. 6465). Eurytopic; a most successful and viable invader (Ref. 6465).

Main reference
 Trewavas, E., 1982. Tilapia: taxonomy and species, p. 3-11. In P. V. Pullin and R.H. Lowe-McConnell (eds.), The biology and culture of tilapia. ICLARM Conf. Proc. 7.

IUCN Red List Status (Ref. 96363)
 Threat to humans: Near Threatened (NT) Potential pest

Human uses
 Fisheries: highly commercial; aquaculture: commercial; gamefish: yes; aquaria: commercial
 FAO/Aquaculture: production; fisheries: production; species profile: publication: (see 44) | FisheriesWiki | Sea Around Us

More information

Common names	Synonyms	Age Size	References	Collaborators
FAO area	Systematics	Growth	Aquaculture	Species
Ecovisions	Metabolism	Length-weight	Aquaculture profile	Stamps
Occurrences	Pathology	Length-length	Genetics	Maps
Introduction	Ecology/Ethology	Length-frequencies	Genetics	Citation
Stocks	Reproduction	Morphometrics	Allies/Associates	Spines
Ecology	Maturity	Morphology	Heritability	Swim type
Diet	Spawning	Larvae	Diseases	Gill area
Food items	Fecundity	Life dynamics	Processing	Otoliths
Food consumption	Eggs	Recruitment	Mass conversion	Brains
Fatigue	Egg development	Abundance	Vision	

Bio-Quiz | E-book | Field guide | Identification keys | Length-frequency wizard | Life-history tool | Point map | Classification Tree | Catch-MSY

Special reports
 Check for Aquarium maintenance | Check for Species Fact Sheets | Check for Aquaculture Fact Sheets

Download XML
 Summary page | Point data | Common names | Photos

Internet sources
 Alien/Invasive Species database | BHL | Cloffa | BOLDSystems | Websites from users | FishWatcher | CISTI | Catalog of Fishes (gen., sp.) | DiscoverLife | Faunafri | Fishtrace | GenBank(genome, nucleotide) | GOBASE | Google Books | Google Scholar | Google | IGFA World Record | iSpecies | Bases de données nationales | Aquariums publics | PubMed | Identification RFE | Scirus | SeaLifeBase | Arbre de Vie | uBio | Wikipedia(Go, chercher) | World Records Freshwater Fishing | Zoological Record

Estimates of some properties based on empirical models
 Phylogenetic diversity index (Ref. 82805): PD₅₀ = 0.5000 [Uniqueness, from 0.5 = low to 2.0 = high]
 Bayesian length-weight: a=0.01820 (0.01431 - 0.02314), b=2.98 (2.94 - 3.02), based on LWR estimates for this species (Ref. 93245).
 Tropic Level (Ref. 69278): 2.2 ±0.0 se; Based on diet studies.
 Resilience (Ref. 69278): Medium, minimum of doubling of population : 1.4 à 4.4 années (K=0.2-0.5; tm<1; tmax=11).
 Vulnérabilité (Ref. 59153): Low to moderate vulnerability (32 of 100).
 Catégorie de prix (Ref. 80766): Unknown.

Outils

Bio-Quiz | E-book | Guide de terrain | Clés d'identification | Générateur de fréquences de longueur | Outil de dynamique de population | Carte par point | Classification Tree | Catch-MSY |

Articles particuliers

Maintenance en aquarium | Articles sur l'espèce | Rapports d'aquaculture

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Sources Internet

Alien/Invasive Species database | BHL | Cloffa | BOLDSystems | Websites from users | FishWatcher | CISTI | Catalog of Fishes (gen., sp.) | DiscoverLife | Faunafri | Fishtrace | GenBank(genome, nucleotide) | GOBASE | Google Books | Google Scholar | Google | IGFA World Record | iSpecies | Bases de données nationales | Aquariums publics | PubMed | Identification RFE | Scirus | SeaLifeBase | Arbre de Vie | uBio | Wikipedia(Go, chercher) | World Records Freshwater Fishing | Zoological Record

Estimates of some properties based on models

Phylogenetic diversity index (Ref. 82805): PD₅₀ = 0.5000 [Uniqueness, from 0.5 = low to 2.0 = high].
 Bayesian length-weight: a=0.01820 (0.01431 - 0.02314), b=2.98 (2.94 - 3.02), based on LWR estimates for this species (Ref. 93245).
 Niveau trophique (Ref. 69278): 2.2 ±0.0 se; Based on diet studies.
 Résilience (Ref. 69278): Milieu, temps minimum de doublement de population : 1,4 à 4,4 années (K=0.2-0.5; tm<1; tmax=11).
 Vulnérabilité (Ref. 59153): Low to moderate vulnerability (32 of 100).
 Catégorie de prix (Ref. 80766): Unknown.



Contact

fishbase@africamuseum.be



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