



F1000Research

Country	United Kingdom - SJR Ranking of United Kingdom
Subject Area and Category	Biochemistry, Genetics and Molecular Biology Biochemistry, Genetics and Molecular Biology (miscellaneous) Immunology and Microbiology Immunology and Microbiology (miscellaneous) Medicine Medicine (miscellaneous) Pharmacology, Toxicology and Pharmaceutics Pharmacology, Toxicology and Pharmaceutics (miscellaneous)

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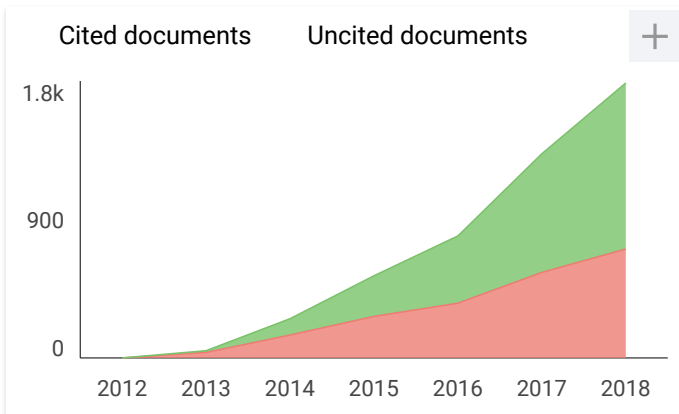
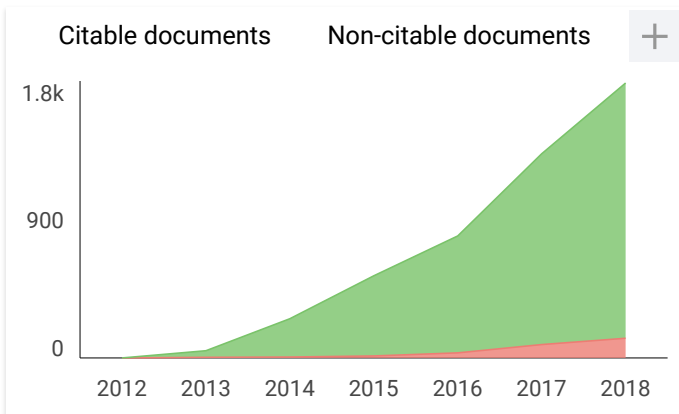
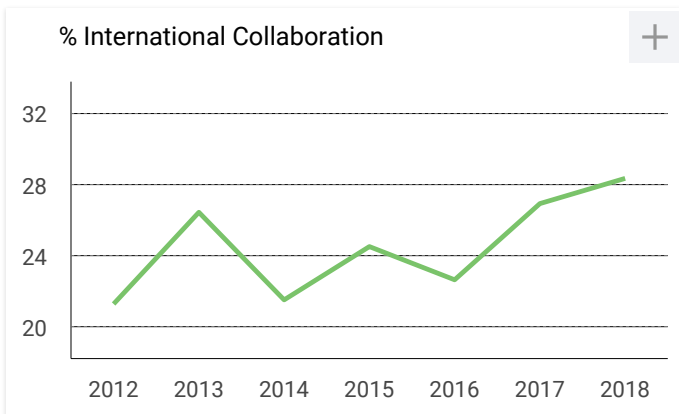
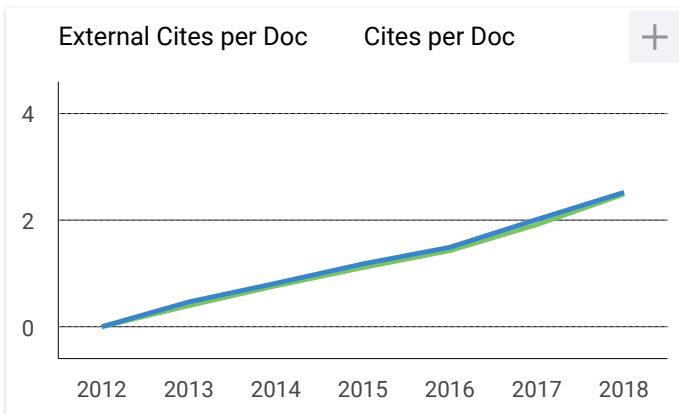
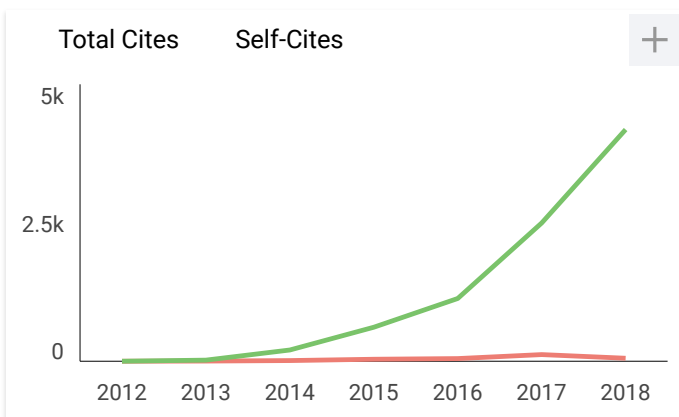
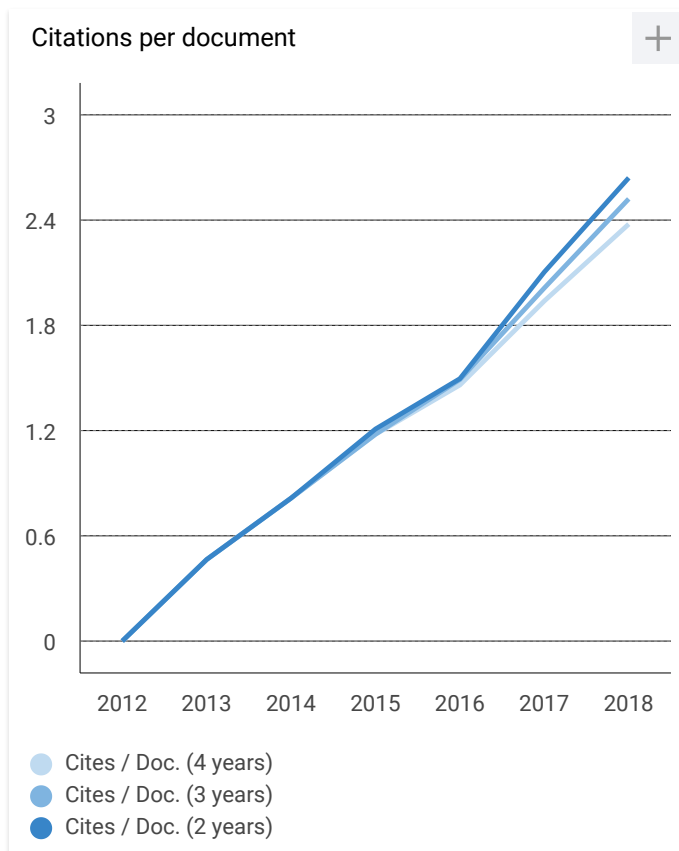
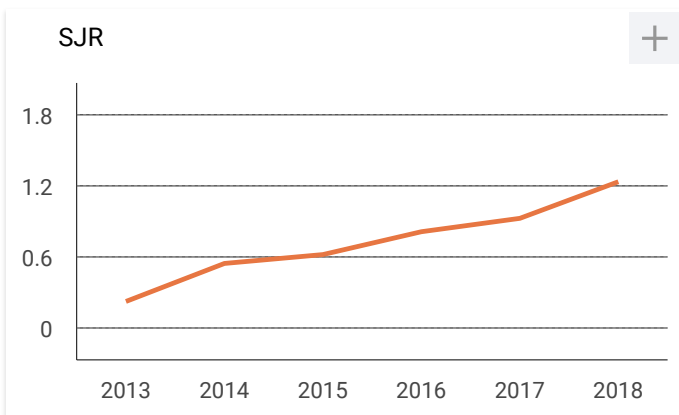
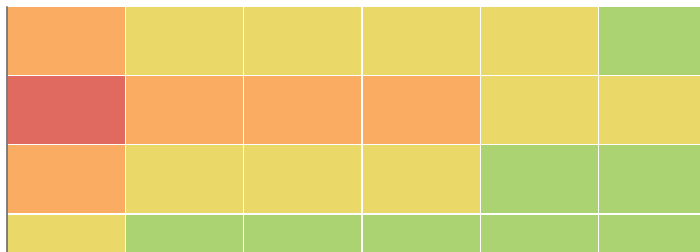
H Index

Publisher	F1000 Research Ltd.
Publication type	Journals
ISSN	20461402
Coverage	2012-ongoing

Scope F1000Research publishes articles and other research outputs reporting basic scientific, scholarly, translational and clinical research across the physical and life sciences, engineering, medicine, social sciences and humanities. F1000Research is a scholarly publication platform set up for the scientific, scholarly and medical research community; each article has at least one author who is a qualified researcher, scholar or clinician actively working in their speciality and who has made a key contribution to the article. Articles must be original (not duplications). All research is suitable irrespective of the perceived level of interest or novelty; we welcome confirmatory and negative results, as well as null studies. F1000Research publishes different type of research, including clinical trials, systematic reviews, software tools, method articles, and many others. Reviews and Opinion articles providing a balanced and comprehensive overview of the latest discoveries in a particular field, or presenting a personal perspective on recent developments, are also welcome. See the full list of article types we accept for more information.

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Melanie Ortiz 4 months ago

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S Seyed 1 year ago

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D Dr Ramesh 2 years ago

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Elena Corera 2 years ago

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F1000Research

TRANSFORMING SCIENTIFIC PUBLISHING

Editorial Board **Welcome Pack**



Thank you for joining the *F1000 Research* Editorial Board

This pack provides details of our publishing model and processes, and guidance on the role of our Editorial Board.

Contents:

- » Your role as a member of the Editorial Board
- » Summary of our publishing model:
 - » Types of article
 - » Pre-refereeing checks
 - » Refereeing process
 - » Versioning
 - » Citation and indexing
- » Frequently Asked Questions (FAQs)

Your role as a member of the Editorial Board

As an *F1000 Research* Editorial Board member, your role can be broadly summarized as follows:

1. To help us identify suitable referees for articles submitted to *F1000 Research* in your area of expertise. If appropriate, you are also welcome to referee articles yourself, but there is no requirement to do so. As we are only just starting, we anticipate submissions will be relatively slow initially; in addition, our Editorial Board is very large, so we don't expect we will require much of your time on a regular basis.
2. To provide advice from time to time regarding our pre-refereeing checks (details below) on articles in your field, and possibly other issues (that we have not yet foreseen) that may require your expert advice.

We now have over 1000 members of the Editorial Board and we will be putting up the full list on the website (<http://f1000research.com>) shortly.

We also have an Advisory Panel of over 230 members (<http://f1000research.com/advisory-panel>), which was set up at the beginning to advise us on the publishing model. Once we formally launch at the end of 2012, we will invite the Advisory Panel to join the Editorial Board.

Issues addressed by our publishing model

In brief, *F1000 Research* will provide an alternative to current (and we believe outmoded) scientific publishing approaches by addressing four of the main issues in scholarly communication (see **Appendix 1** for a summary diagram):

1. Unnecessary publication delays

F1000 Research submissions will be published **immediately**, following a brief internal review.

2. Unattributed, 'closed' peer review

F1000 Research will provide a rapid, formal, and completely open peer review process, post-publication.

3. Inflexibility of article types

A wide range of research findings, including null/negative and replication/refutation findings will be encouraged.

4. Lack of primary data

F1000 Research will provide a forum for the publication and refereeing of datasets, in the form of separate data articles.

We are inviting submissions from all areas of biology and medicine. *F1000 Research* will be 'Gold' Open Access, i.e. with article processing charges (APCs) that will be competitive with the other major open access publishers (details to follow separately). As a member of the Editorial Board, you will be given a discount of 50% off the APCs. All charges will be waived in 2012.

We will also use the most open of the standard Creative Commons licences (CC-BY; <http://creativecommons.org/licenses/by/3.0/>) as the default for submissions, which leaves copyright of the content with whomever was the copyright holder (usually the author or institution) and enables text mining. We aim to ensure that all data associated with the articles will be published under a CCO licence (<http://creativecommons.org/publicdomain/zero/1.0/>), which avoids problems of attribution stacking when combining multiple datasets for further analysis.

Types of article

F1000 Research will publish the following types of articles:

- a. **Research Articles:** An article presenting original findings in biology and medicine, including the results of scientific research, epidemiologic studies, method papers and clinical trials. Null/negative findings and replication/refutation findings will also be encouraged. All Research Articles should be accompanied by their supporting data where possible and, where appropriate, the data should be presented as a linked Data Article.
- b. **Data Articles:** A dataset (or set of datasets) together with the associated methods/protocol used to generate the data. A Data Article may be published as a stand-alone article, or in conjunction with a Research Article.
- c. **Case Reports:** A Case Report should be original and expand general medical knowledge.
- d. **Commentaries/Opinion Articles:** An opinion-based article on a topical issue of broad interest.
- e. **Reviews:** An overview of the latest discoveries in a particular field.

Pre-refereeing checks

All submissions to *F1000 Research* will go through a rapid initial check by the in-house editorial team before being published. Our editorial team will check the appropriateness of the article (including content, quality, tone and format), ensure it is intelligible and that it is written in good English. See **Appendix 2** for a longer list of what we'll check.

If a submission fails our initial checks, it will be returned to the authors to address the issues, and if they are not addressed satisfactorily, the article will not be accepted. If our in-house editorial team have concerns but are not completely sure whether to accept a submission, we will contact a relevant member of the Editorial Board for advice.

Any article that passes these initial checks will be published and clearly marked as 'awaiting peer review' until the first review is provided.

Refereeing process

We will ask a relevant member of the Editorial Board to suggest 3–5 potential referees for each article. Referees should be individuals who:

- » to your knowledge, have not collaborated with the authors in the past 5 years
- » are not from the authors' own institution
- » are of an appropriate level of standing in their community but not so senior to be unlikely to undertake such refereeing
- » collectively provide a good international breadth to your choices

Initially, we will ask referees to inform us (within 4 days) whether the work seems scientifically sound. These responses will be displayed immediately alongside the article and within the article citation, providing a peer review status for the article that will be updated as new referee responses arrive. Referees will then be encouraged (either at the same time or soon after, but within 2 weeks) to provide a more detailed referee report (see **Appendix 3**), which will also be displayed with the article. All referee names and their comments will be published. See **Appendix 4** for an example of how the referee status will be displayed on the main article page, and **Appendix 5** for how the referee reports will be displayed.

Registered users (i.e. those we can verify as research scientists or clinicians) will also be able to comment on the article or on any referee report at any time.

Versioning

Authors will be strongly encouraged to make appropriate amendments suggested by the referees. The authors will be able to discuss any referee comments openly with the reviewers on the site.

All versions of an article will be accessible, each with their own DOI (digital object identifier) and may be cited individually. The most recent version will be displayed as the default.

Every article will be indexed by the CrossMark Identification Service™. CrossMark is a new service that provides a way of viewing the history of an article and any linked publications. All our articles will carry the CrossMark logo, which (when clicked on) will make readers aware of newer (or older) versions of the article, as well as of all referee reports and associated articles.

Citation and indexing

Standard citation approaches are not sufficient for *F1000 Research* articles because:

- » The referee status of an article will change after publication
- » An article may have many versions as it is adapted in response to the referee comments it has received

After discussion with our Advisory Panel, major indexing services and others, we have adapted the current system of citation to include an indication of the referee status and the version of an article.

This citation will include three additional elements, placed in square brackets, immediately after the article title (to avoid them being accidentally removed on copying):

- » Article version number
- » Details of the referee status, i.e. number of 'Approved' and 'Not Approved' referee reviews
- » A shortened hyperlink to a page that shows the current referee status of the article

Example article citation:

Smith A, Jones B
Cellular networks controlling Th2 polarization in allergy and immunity
 [v3; ref status: Approved 1, Not Approved 1, <http://f1000r.es/123456>]
F1000 Research 2012, **1**: 23
 DOI: 10.3410/f1000r.2012-23.v3

Once an article has received a minimum of two positive referee responses, the article will be indexed – currently in Scopus, Embase and Google Scholar – and the status of the article will change to 'Indexed' (see example below). We are working closely with Web of Science and PubMed to index *F1000 Research* articles, though we will need to have published for a few months before we can apply more formally.

Example citation once indexed:

Smith A, Jones B
Cellular networks controlling Th2 polarization in allergy and immunity
 [v3; ref status: Indexed, <http://f1000r.es/123456>]
F1000 Research 2012, **1**: 23
 DOI: 10.3410/f1000r.2012-23.v3

FAQs

Why not publish after peer review?

The point of conducting peer review post publication is to enable others to see the work during review, unlike a closed (and sometimes biased) review process, which can often take many months, sometimes even years, and which could allow other competing papers to sneak in and be published first. The advantage of the *F1000 Research* system is that we remove the possibility of a paper being deliberately blocked or held up by a single editor or referee.

Why not keep the peer review process anonymous?

BMJ Open and the medical BMC-series journals have found that the type of referee reviews they receive through their open peer review systems are actually much more constructive. We also plan to allow our registered users to comment on articles and reviews at any time, which we believe will redress any imbalance from the referees (i.e. if they are overly positive or overly critical of an article). Given this transparency and attribution, it will not be in a referee's interest to say an article is satisfactory if it clearly is not.

How will you encourage good quality submissions?

As our refereeing process is completely open, we would expect that this will have the effect of making the initial submissions of much higher quality as it is not in an author's interest to submit an article that will be openly criticised. This in turn will save the time of the referees and will avoid issues that commonly occur now, where the authors submit an article in a poor state in the hope that the referees will recommend improvements.

How will you avoid poor quality work being cited and used to support certain points of view?

In the current publishing system, most articles will get published in a 'peer reviewed' journal if the authors are persistent enough, and the reader will be none the wiser that previous referees had said the article was of poor quality. With our model, the reader will immediately see the comments from the first few referees. In addition, these details will be included in the citation, avoiding the need for further referees to spend time reviewing the article, only to say the same thing.

[continued overleaf]

What happens if an article passes the pre-refereeing check but the referees then find serious problems with the article?

If an article receives only negative reviews, it will be removed from the default search and, as the major indexers are only going to index the articles once an article has received a minimum of 2 positive reviews, it will not be indexed. If the authors realise there is something seriously wrong with the paper, they can either correct it or they can ask for it to be marked as 'Withdrawn'. In cases of alleged fraud or plagiarism, the article will be investigated and, if proven, will be marked as 'Retracted'. We have drawn up clear guidelines on article withdrawal, retraction, removal and replacement, which will be published on the site.

As a reader, will I need to read through each version of an article?

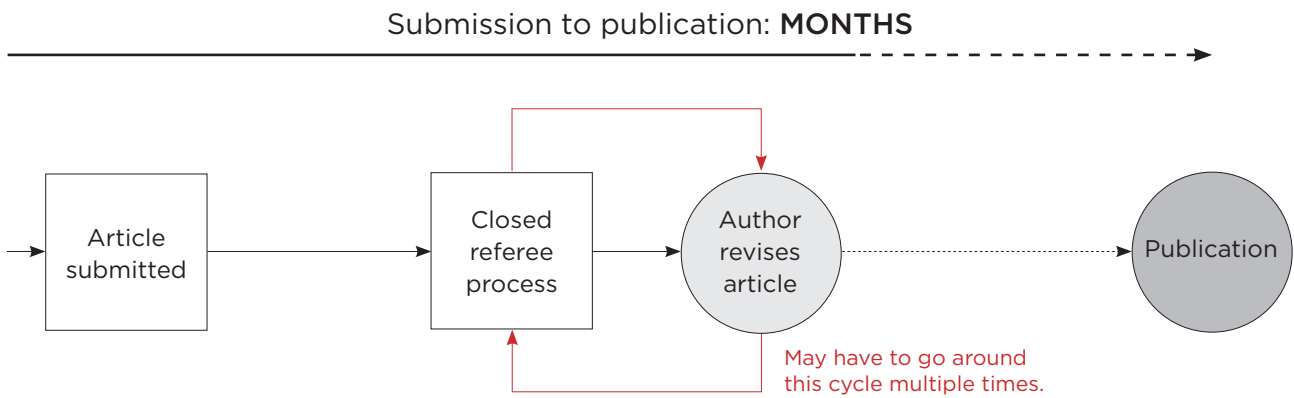
Readers will have the choice to view the article as soon as it is published (you may want to see new research right away even if it is not yet perfect, which is one of the perks of being a referee in the current system), or you can decide you only want to be alerted to new articles once they have reached 'Indexed' status. We are also developing tools to enable readers to compare versions of an article and to see what has been changed.

Appendices

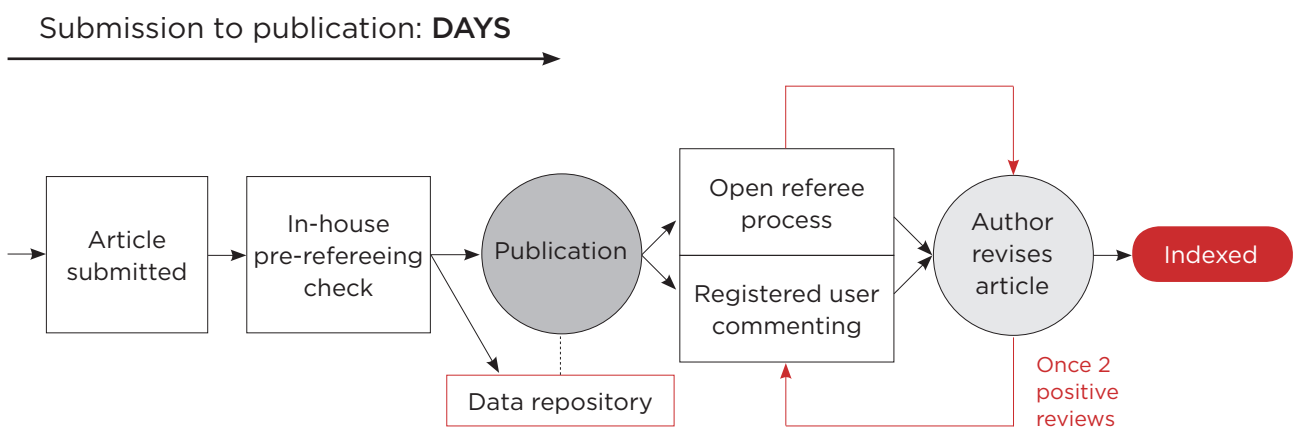


Appendix 1: Publishing process

Traditional journal



F1000 Research



Appendix 2: Pre-refereeing check

Each article will go through several checks by the in-house Editorial team prior to publication.

Research Articles

For Research Articles, we will make the following checks:

- » Is it within either biology or medicine?
- » Is it nonsense?
- » Is there any obvious evidence of plagiarism in the text and images?
- » Does it meet the core elements of the basic Author Guidelines?
- » Is it readable (quality of English)?
- » Are the author(s) from a credible organisation or institution?
- » Does it have unduly high levels of self-citation or old references?

Data Articles

Data Articles will go through additional checks by the in-house Editorial team:

Data File(s)

- » Are the data in a usable file format?
- » Are the data stored in the most appropriate and stable location?
- » Is the structure of data file appropriate, e.g. avoiding cell colours in Excel spreadsheets?
- » Do all fields (e.g. columns and rows) have suitable headings?

Data Article

- » Has adequate protocol information been provided?
- » Have adequate metadata been supplied (once this has been implemented)?
- » Are acronyms and abbreviations in the data file explained in the protocol?
- » Have the authors confirmed they have met all standards for animal experimentation (where relevant)?

Clinical Trial Article

- » Has a completed signed CONSORT checklist been provided?
- » Has the original Study Protocol been adhered to?
- » Have the trial registration number and the name of the trial registry been provided?

Appendix 3: Referee checks

Research Article or Commentary

The following are specific questions we will ask referees to consider when refereeing a Research Article or a Commentary:

- » Is the title appropriate for the content of the article?
- » Is the abstract a suitable summary of the article?
- » Is the article well constructed and clear?
- » Is there adequate analysis, including information on how the data were analyzed (e.g. programs, code, stats etc.)?
- » Are the conclusions sensible and balanced?
- » Have any potential biases or competing interests been disclosed?
- » For clinical trials: Should a statistician be asked to review the article?

Data Article

For Data Articles, we will ask referees to consider a different set of questions:

- » Is the title appropriate for the content of the article?
- » Is the abstract a suitable summary of the article?
- » Is the article well constructed and clear?
- » Has the experiment been conducted properly, e.g. appropriate controls, data measured and collected appropriately, time-points or levels of error (decimal points etc.) appropriate?
- » Has enough information been provided to be able to replicate the experiment?
- » Are the data in a usable format/structure?
- » Have all the necessary data been provided (is there anything obviously excluded)?
- » Is the data repository suitable for the data type?
- » Are stated data limitations and possible sources of error appropriately described?
- » Where applicable (e.g. microarray data): Do the data 'look' OK?
- » For clinical trials: Should a statistician be asked to review the article?

Appendix 4: Sample article screenshot

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Cellular networks controlling Th2 polarization in allergy and immunity [v3; ref status: Indexed, <http://bit.ly.12345>]

Mirjam Kool^{1,2}, Hamida Hammad^{1,3}, and Bart N. Lambrecht^{1,2,3}

Research Article

Comments 8

Author Affiliations

F1000 Research 2012, 4:6 (doi: 10.2410/f1000research/123456)
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First published: 15 March 2012, 4:6 (doi: 10.2410/f1000research/123456/v1)
Latest version: 26 March 2012, 4:6 (doi: 10.2410/f1000research/123456/v3)

All versions

First approved: 20 March 2012

Associated Data Article(s):

» [Sengupta, P et al. F1000 Research 2012, 1:3 \(doi: 10.2410/f1000research/123456\)](#)

Abstract

In contrast to the development of Th1 (type 1 T helper cells), Th17 and Treg (regulatory T cells), little is known of the mechanisms governing Th2 development, which is important for immunity to helminths and for us to understand the pathogenesis of allergy. A picture is emerging in which mucosal epithelial cells instruct dendritic cells to promote Th2 responses in the absence of IL-12 (interleukin 12) production and provide instruction through thymic stromal lymphopoietin (TSLP) or granulocyte-macrophage colony stimulating factor (GM-CSF). At the same time, allergens, helminths and chemical adjuvants elicit the response of innate immune cells like basophils, which provide more polarizing cytokines and IL-4 and reinforce Th2 immunity. This unique communication between cells will only be fully appreciated if we study Th2 immunity in vivo and in a tissue-specific context, and can only be fully understood if we compare several models of Th2 immune response induction.

[Full Text](#)

Introduction: Th2 Lymphocytes, the lesser gods of immunity

Th2 cell immunity is something of a two-edged sword. These cells evolved to fight off parasites, but they are also responsible for allergic diseases. Recent advances in understanding Th2 immunity bring us closer to more effective treatments for allergic diseases like allergic asthma and rhinitis, atopic dermatitis and food allergy. These are clearly on the rise in western societies, and pose a significant burden on the health of millions of patients and on health expenditure.

The immune system evolved to neutralize or kill invading pathogens, while at the same time avoiding reactivity to self, harmless commensal organisms and environmental antigens like allergens. Most often, pathogens are neutralized through the effector mechanisms of innate immunity, such as the activation of complement, and phagocytosis and/or killing by macrophages, neutrophils or eosinophils. These innate responses are reinforced by adaptive immunity, in that humoral immunity facilitates complement activation and phagocytosis by innate immune cells and that particular subsets of T lymphocytes help innate effector cells through release of cytokines. CD4+ T helper lymphocytes are divided into broad categories based on the cytokines produced. Th1 lymphocytes produce interferon (IFN)- γ and stimulate the phagocytosis and killing of intracellular bacteria by macrophages. Th17 lymphocytes produce IL-17, which stimulates neutrophils to kill extracellular bacteria and fungi. Th2 lymphocytes produce IL-4, IL-5 and IL-13. IL-5 stimulates the differentiation of eosinophils, which have important roles in killing helminths and other parasites, whereas IL-4 and IL-13 stimulate contraction of smooth muscle and overproduction of mucus, which helps in expulsion of helminths from the

Referee Reports 5

- ✔ Jane Smith
Approved status 20 Mar 2012 (v1)
Ref report 20 Mar 2012
- ✔ Thomas Evans
Approved status 4 Apr 2012 (v1)
Ref report 31 Aug 2012
- ✘ James Shaw 26 Aug 2012 (v1)
Ref report 31 Aug 2012
- ✘ David Watts 2 Sep 2012 (v1)
Ref report 2 Sep 2012
Author update 3 Sep 2012 (v2)
- ✔ Ben James
Ref report 4 Sep 2012 (v1)
Author update 5 Sep 2012 (v3)
Approved status 7 Sep 2012 (v3)
Ref report 6 Sep 2012

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Appendix 5: Sample screenshot showing detailed referee status

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Cellular networks controlling Th2 polarization in allergy and immunity [v3; ref status: Indexed, <http://bit.ly.12345>]

Mirjam Kool^{1,2}, Hamida Hammad^{1,3}, and **Bart N. Lambrecht**^{1,2,3}

Research Article

Comments 8

Current Referee Status: ✔ ✔ ✔ ✘ ✘

[Jane Smith](#), Harvard University, USA

Referee Report 20 Mar 2012 (v1)

In contrast to the development of Th1 (type 1 T helper cells), Th17 and Treg (regulatory T cells), little is known of the mechanisms governing Th2 development, which is important for immunity to helminths and for us to understand the pathogenesis of allergy. A picture is emerging in which mucosal...

Continue reading ▼

[Thomas Evans](#), Centre National de la Recherche Scientifique, Université Paris-Sud, France

[James Shaw](#), St Antonius Hospital, Netherlands

Referee Report 31 Aug 2012 (v1)

In contrast to the development of Th1 (type 1 T helper cells), Th17 and Treg (regulatory T cells), little is known of the mechanisms governing Th2 development, which is important for immunity to helminths and for us to understand the pathogenesis of allergy. A picture is emerging in which mucosal...

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[David Watts](#), Duke University Medical Center, NC, USA

Referee Report 2 Sep 2012 (v1)

In contrast to the development of Th1 (type 1 T helper cells), Th17 and Treg (regulatory T cells), little is known of the mechanisms governing Th2 development, which is important for immunity to helminths and for us to understand the pathogenesis of allergy. A picture is emerging in which mucosal...

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Author Update 3 Sep 2012 (v2)

In contrast to the development of Th1 (type 1 T helper cells), Th17 and Treg (regulatory T cells), little is known of the mechanisms governing Th2 development, which is important for immunity to helminths and for us to understand the pathogenesis of allergy. A picture is emerging in which mucosal...

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[Ben James](#), Stanford University Medical Center, CA, USA

Referee Report 4 Sep 2012 (v1)

Referee Reports 5

- [Jane Smith](#)

Approved status 20 Mar 2012 (v1)

Ref report 20 Mar 2012
- [Thomas Evans](#)

Approved status 4 Apr 2012 (v1)
- [James Shaw](#) 26 Aug 2012 (v1)

Ref report 31 Aug 2012
- [David Watts](#) 2 Sep 2012 (v1)

Ref report 2 Sep 2012

Author update 3 Sep 2012 (v2)
- [Ben James](#)

Ref report 4 Sep 2012 (v1)

Author update 5 Sep 2012 (v3)

Approved status 7 Sep 2012 (v3)

Ref report 6 Sep 2012

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HaakYak

Yak @F1000Research @ORCID_Org ... and @F1000Research it was you who put the bug in my ear about using ORCIDs for... <https://t.co/loY0VQFHtn>



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arch We welcome a wide range of research outputs in the #DiseaseOutbreaks Gateway on @F1000Research – including data not... <https://t.co/Y5BNJUFIhh>



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What species make up the Nike fish assemblages at the macrotidal estuary in Gorontalo Bay, Indonesia? [version 1; peer review: 2 approved with reservations]

✉ Femy M. Sahami (mailto:femysahami@ung.ac.id) (<http://orcid.org/0000-0002-6273-3109>)¹, Rene Charles Kepel², Abdul Hafidz Olii¹, Silvester Benny Pratasik (<http://orcid.org/0000-0002-3765-509X>)²

PUBLISHED 18 Sep 2019



OPEN PEER REVIEW

DETAILS

REVIEWER STATUS



Abstract

Background: No study has documented the species composition of Nike fish (fam: Gobiidae) schools. The aim of this study is to document the species composition of the Nike-fish schooling.

Methods: All samples were collected randomly from fisher's catch during the fishing season on 5th–11th October 2018 at macrotidal area in Leato. Then, all specimens were identified morphologically by melanophore pattern differences. Subsequently, all identified-samples by melanophores pattern differences were sent to the genetic laboratory for identification.

Results: The morphological results show there are five individuals with a different melanophores pattern. On the contrary, the genetic results only show four species from those five individuals. They are *Sicyopterus pugnans*, *S. cynocephalus*, *Belobranchius segura*, and *Bunaka gyrinoides*.

Conclusions: Our findings show that there are only four species that compose the Nike fish schooling in Gorontalo Bay. They are *Sicyopterus pugnans*, *Sicyopterus cynocephalus*, *Belobranchius segura* and *Bunaka avrinoides*



RESEARCH ARTICLE

What species make up the Nike fish assemblages at the macrotidal estuary in Gorontalo Bay, Indonesia? [version 1; peer review: 2 approved with reservations]

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Keywords

Nike-fish, Gorontalo, melanophores pattern, genetic, morphology

Open Peer Review

Reviewer Status ? ?

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	1	2
version 1 18 Sep 2019	? report	? report

- Dini Wahyu Kartika Sari**, Gadjah Mada University, Yogyakarta, Indonesia
- Ken Maeda**, Okinawa Institute of Science and Technology Graduate University (OIST), Onna, Japan

Any reports and responses or comments on the article can be found at the end of the article.

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Introduction

Estuaries are a crucial habitat for biota and small fish, in particular juveniles of commercially relevant species. They are considered as the most productive and dynamic ecosystem in the world (Cantera & Blanco, 2001; Lahjie *et al.*, 2019; McHugh, 1967; Sreekanth *et al.*, 2017). They also perform the most crucial role in the population dynamic for a lot of invertebrate and fish species. These ecosystems also significantly contribute to provide some ecological services such as nursery ground, feeding ground and breeding habitats for both freshwater and marine species (Beck *et al.*, 2001; McLusky & Elliott, 2004; Sun *et al.*, 2019). The most well-known species that occupy the seas and estuary area in Gorontalo Bay is Nike fish.

Nike (pronounced nee-K) is a local name for transparent juvenile of unknown fish. These fish are approximately 2–4 cm in length; they appear seasonally and fished at estuary waters around the Gorontalo Bay. These juvenile fish has been fished and marketed traditionally for a long time. They are preferable for consumption by the local people than other fisheries products. As a consequence, fishing activity has increased over time to supply local demand for Nike (Wolok *et al.*, 2019).

However, the impact of fishing activities is unknown. A recent paper concerning Nike only reports the seasonal appearance during the fishing season (Pasingi & Abdullah, 2018), total length and morphometric measurements (Zakaria, 2018), nutrition content (Liputo *et al.*, 2013), and mercury contamination of these fish (Salam *et al.*, 2016). To our knowledge, no studies have documented the species diversity that composed the schooling of Nike. Although, Yamasaki *et al.* (2011) have

reported that species in juvenile form can be determined by its melanophores pattern and genetic determination.

The objective of the present study is to address this lack of knowledge by identifying the fish species that composed a Nike fish schooling. This information is very urgent and required for fisheries management. Therefore, we aimed to identify the species that composed the schooling of Nike fish in Gorontalo Bay by melanophores pattern and genetic identification.

Methods

This study was conducted in October 2018 at Leato (0°30'0.58"N, 123°3'55.42"E), Gorontalo Bay, Indonesia (Figure 2). Approximately 100 g of the Nike-Fish Assemblages (Figure 1) were collected randomly from the fishermen's catch at fishing grounds

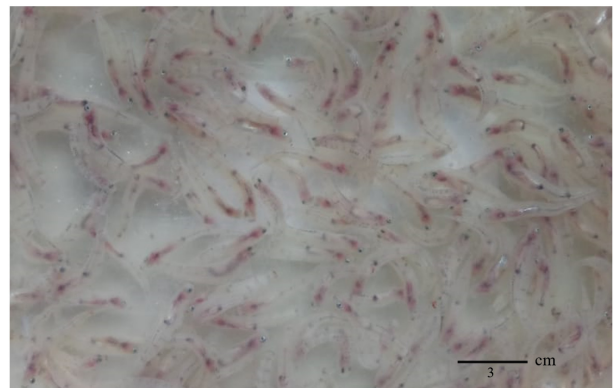


Figure 1. Nike fish assemblages.



Figure 2. Study site. The red dot indicates the position of fishing ground where the samples were collected from fishermen.

during the catch-season (on October 5th–11th). All samples were transported using a cool-box to the lab for measurement. Immediately after collection, all samples were identified visually according to [Yamasaki et al. \(2011\)](#), and the specimens with different melanophore patterns were separated according to their melanophore display. We assumed that those separated individuals were different on species.

Then, we selected one individual from each group and labeled these as N1, N2, N3, N4, N5, for genetic identification. Images of the selected samples were captured using Canon EOS 100d with 58 mm pro Digital Wide Converter 0.45X Lens and subsequently converted to black and white using CorelDraw Graphic Suite 2019.

After selection, all of the individuals with different melanophores were preserved with ethanol 70% in a separate bottle and sent to the Genetics Laboratory at Manokwari for genetic identification by Sanger sequencing. The DNA cytochrome oxidase subunit I (CO1) of the sample was isolated with a Geneaid™ DNA Isolation Kit. Editing, and proofreading of sequences, and construction of the phylogenetic tree was generated with [MEGA 5.0](#) software.

Results

Five unspecified individuals of Nike-fish were identified morphologically by melanophore differences, as shown in [Figure 3](#). N1 was revealed as *Sicyopterus pugnans*; N2 as *Sicyopterus cynocephalus*; N3 and N5 as *Belobranchus segura*; and N4 as *Bunaka gyrinoides*. The specimens with melanophore differences of each group is shown in [Figure 4](#).

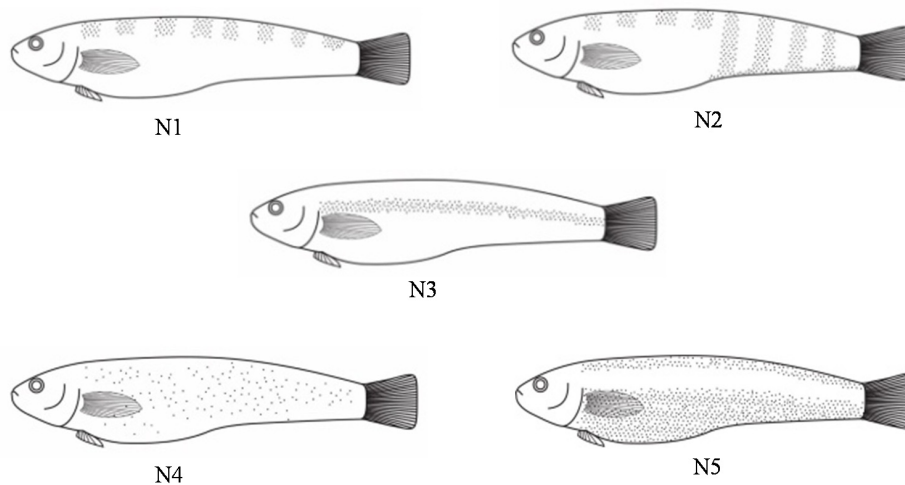


Figure 3. Nike fish with different melanophore patterns.

Melanophores pattern

Nike-fish schools consist of various species with the same body-shape, but different melanophore displays. Moreover, from 100 g (~145 individuals) of the total specimens that we identified, only five individuals with different melanophore patterns were identified ([Figure 3](#)).

Genetic identification

[Figure 3](#) shows the genetic identification among the individuals (species). The outcomes of genetic identification for N3 and N5 shows that both samples are the same species: *Belobranchus segura*.

Discussion

Although the melanophore patterns in N3 and N5 are different, their genetics are identical, meaning they are the same species (*Belobranchus segura*). This dissimilarity might be affected by the changes of melanophore during the development of the larvae. [Valade et al. \(2009\)](#) report that such melanophores change on *Sicyopterus langocephalus* during the larvae stage. These changes could represent a problem for morphological identification. We can not count the species by morphological differences. Therefore, for the next examination we strongly recommended determining the species composition of the Nike fish schools by genetic rather than morphological identification because for that reason.

Conclusion

Our findings show that there are four species that compose Nike fish schooling. They are *Sicyopterus pugnans*, *Sicyopterus cynocephalus*, *Belobranchus segura*, and *Bunaka gyrinoides*.

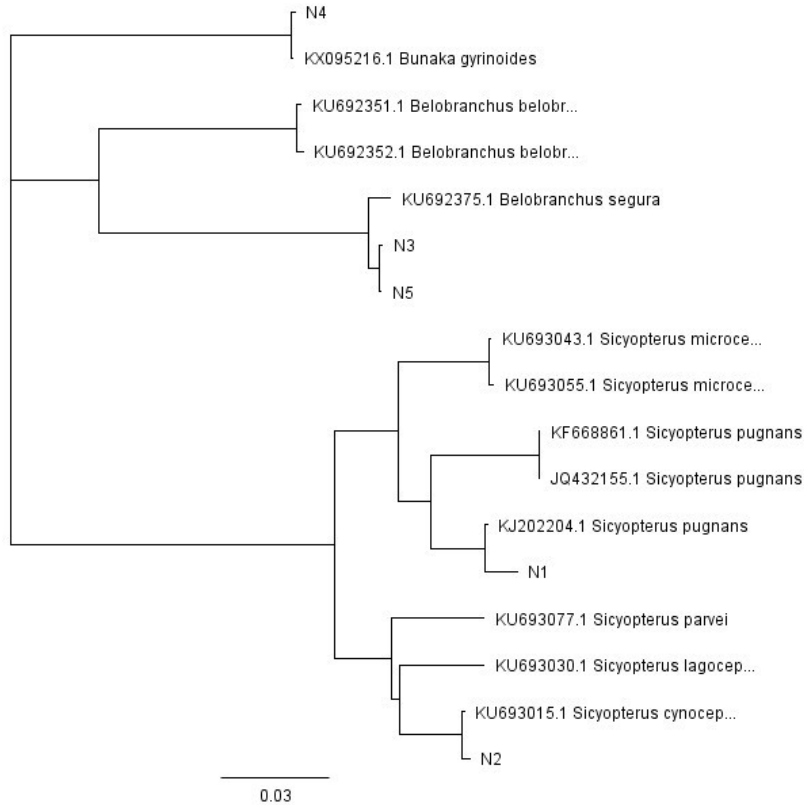


Figure 4. Phylogenetic tree of individuals with different melanophore patterns.

Data availability

Underlying data

Group N1, *Sicyopterus pugnans* isolate N1_LEATO_1 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial. GenBank accession number [MN065178](#).

Group N2, *Sicyopterus cynocephalus* isolate N2_LEATO_1 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial. GenBank accession number [MN069305](#).

Group N3, *Belobranchus segura* isolate N3_LEATO_1 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial. GenBank accession number [MN069306](#).

Group N4, *Bunaka gyrinoides* isolate N4_LEATO_1 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial. GenBank accession number [MN069307](#).

Group N5, *Belobranchus segura* isolate N5_LEATO_1 cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial. GenBank accession number [MN069308](#).

Acknowledgements

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Version 1

Reviewer Report 23 October 2019

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Ken Maeda

Okinawa Institute of Science and Technology Graduate University (OIST), Onna, Japan

If the nuke-fish material was composed of *Sicyopterus*, *Bunaka*, and *Belobranchus* species, the larvae must represent different shapes, for example, standard length, head length, preanal length, length of caudal peduncle, fin-ray counts (especially second dorsal, anal and pectoral fins), and fin shapes (especially pelvic fin). Although arrangements of the pigments scattering upon the body surface were shown in the Figure 3, melanophores along the dorsal and ventral midlines are more useful for identification. Morphological identification of these taxa are not difficult at least to the genus level. Please observe the morphologies of the specimens carefully before the molecular identification.

Introduction

Second paragraph:

- The first sentence should be “Nike (pronounced nee-k) is a local name for transparent postflexion larvae of fish, but it has not been identified to the species as well as the genus or family level.”
- If you or the local people actually used to know what it is, for example, they are young gobies, please write it.
- Does the “length” mean standard length or total length? Please specify, they are significantly different.

Third paragraph:

- Yamasaki et al. (2011) provided key morphological characters (not only the melanophore patterns) to identify species of the newly hatched larvae (not for postflexion larvae and juveniles) of goby. They did not use genetic characters for the larval identification.

Methods

First paragraph:

- How did you identify the samples visually according to Yamasaki et al. (2011)? They described the morphologies of newly hatched larvae, not the postflexion larvae and juveniles. See the comment above.
- Was the collection site the sea, not the estuary? According to the Figure 2, it is marine environment, 150-200 m off from the coast.

Second paragraph:

- Because the images have not been used in the manuscript, you don't need to write the second sentence.

Results

First sentence:

- Please replace "five unspecified individuals" with "five unspecified types".
- *Sicyopterus pugnans* is a species in Polynesia. So probably it is a misidentification. Please remind that the information in the database is not always correct. Indeed the *Sicyopterus pugnans* in the figure 4 is divided in to two clades. If they are different species, at least one of them is not the *S. pugnans*. Please consider the meaning of the results before trusting the information of the database blindly. Please suggest the possibility of misidentification in the Discussion.

Melanophore patterns:

- As I wrote above, if the nuke material was composed of *Sicyopterus*, *Bunaka*, and *Belobranchus* species, the larvae can be identified at least at the genus level by their morphologies. Please observe the specimens carefully before saying "same body shape".

Discussion

- I don't agree with the last two sentences.

Figure 1

- Please write status of the larvae. Are they living, on ice, or fixed in 70% ethanol?
- The scale bar must be an error. The larvae are too big, if the bar indicates 3 cm. Please confirm.

Is the work clearly and accurately presented and does it cite the current literature?

Partly

Is the study design appropriate and is the work technically sound?

Partly

Are sufficient details of methods and analysis provided to allow replication by others?

Partly

If applicable, is the statistical analysis and its interpretation appropriate?

Not applicable

Are all the source data underlying the results available to ensure full reproducibility?

Partly

Are the conclusions drawn adequately supported by the results?

Partly

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: larval biology of goby

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 17 October 2019

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Dini Wahyu Kartika Sari

Department of Fisheries, Faculty of Agriculture, Gadjah Mada University, Yogyakarta, Indonesia

Methods:

1. Do not show clearly how many samples of the Nike either for morphological analysis or molecular analysis.
2. No information about the size of the Nike.
3. What is the mean of "The DNA cytochrome oxidase subunit I (CO1) of the sample was isolated with a Genaeid DNA isolation kit"? It should be genomic DNA.
4. No primer information used in this study.
5. No information about the PCR mix and the PCR condition.
6. No information about how the authors got the sequence result? Sequencing done by who?

Is the work clearly and accurately presented and does it cite the current literature?

Partly

Is the study design appropriate and is the work technically sound?

Partly

Are sufficient details of methods and analysis provided to allow replication by others?

Partly

If applicable, is the statistical analysis and its interpretation appropriate?

Partly

Are all the source data underlying the results available to ensure full reproducibility?

Partly

Are the conclusions drawn adequately supported by the results?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Fish Genetics

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

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