

STUDENT SURVEY

Please send this survey to Veronika Eberl at the **BOKU International Relations** (e-mail: kuwi@boku.ac.at) **within two months** of the end of the study abroad period. The letter of acknowledgement from the host institution should also be turned in to IR (Peter Jordan Straße 82A, 1190 Wien). If all forms are not handed in (including this one), it is possible that the entire sum of the scholarship must be re-paid by the recipient to KUWI (see the agreement).

BASIC INFORMATION

1. Name of student: anonymous

Field of study: Limnology and Wetland Management
Host Institution: Kenya Marine and Fisheries Research Institute
Host country/city: Mombasa, Kenya
Study Abroad Period: from 2.11.2020 until 29.1.2021

RECOMMENDATIONS FOR FUTURE STUDENTS

2. Information about the research offerings at the host institution:

How helpful were the following informational resources?

(1 = not helpful to 5 = very helpful)

- 5 BOKU- International Relations
- 5 Lecturers at BOKU
- 5 Degree course schemes
- 5 Students / friends
- 5 Host institution
- 5 Host institution's web homepages

Other:

3. How would you rank your knowledge of the language spoken at your host institution?

(1 = little to 5 = excellent)

	Vor dem Aufenthalt im Ausland					Nach dem Aufenthalt im Ausland				
	1	2	3	4	5	1	2	3	4	5
Reading comprehension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Listening comprehension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Speaking ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Writing Ability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4. Languages most often used at the host institution, in percent:

Used language German: Ja Nein

1.English	100	2.Swahili	20
3.		4.	

Which recommendations/tips would you give to future students about the host country and host institution?

(Please give any recommendations, information resources, contacts and links)

5. Host country

It is a multicultural country encompassing diverse and ethnic cultural aspects, a great avenue to learn and expound on knowledge and experiences.
There is hidden treasure in the communities, go find it!

Egerton University, LWM Coordinator & Director Post graduate, Prof. Nzula Kitaka

KMFRI-Mombasa, Senior Research Scientist & Assistant Director Mariculture, Dr. David Oersted Mirera

Kwetu Training Centre-Mtwapa, community outreach, Centre Director, Mr. Brendan Mutua Muli

Information resources
<https://www.britannica.com/place/Kenya>
<https://www.nationsonline.org/oneworld/kenya.htm>
<https://magicalkenya.com/>
<https://en.wikipedia.org/wiki/Kenya>
<https://www.touropia.com/tourist-attractions-in-kenya/>
<https://www.charlotteplansatrip.com/en/kenya/budget-money/>

6. Host institution

Hosts a multidisciplinary research ventures ranging from marine to freshwater systems with varied scope of operation and diverse professionalism.
An open mind is key to survival and tapping into wealthy knowledge and experience

KMFRI Mombasa

7. To which degree did you feel socially integrated??

(1 = not at all to 5 = very good)

	1	2	3	4	5
Local culture/ society overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
With students from the host institution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
With other foreign students at the host institution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. With help from which contact person (at BOKU/ at the host institution) did you organize your stay?

Nina Haslinger (IPGL Office, BOKU)
 Veronika Eberl (KUWI, BOKU)
 Prof. Nzula Kitaka (LWM Coordinator, Egerton University)
 Dr. David O. Mirera (KMFRI Mombasa)

9. To which degree would you rate the support you were thereby given (before and after your stay)?

(1 = low to 5 = high)

<input type="checkbox"/>	5	Center for International Relations
<input type="checkbox"/>	5	Lecturers at BOKU
<input type="checkbox"/>	5	Host institution
<input type="checkbox"/>	5	Students from the host institution
<input type="checkbox"/>	5	Other: local community, family and friends

10. Application forms, financial support, other needs

Early preparations in terms of research project plan development and costs determination is vital for ease stay abroad and having prior information to place of residence. These preparations help identify loopholes in regard to finances and diverse cultural settling in. The application process is not hectic as an able team is readily available to help.

11. Please give tips and helpful suggestions in reference to your host country/ host institution regarding society (cultural differences, importance of command of language, etc.):

Accepting the diverse and ethnic differences is key in adapting to any culture. Kenyans are key to learn and easily share their culture irrespective of the language; there is always a smiling face (common spoken language) despite language barriers. However, cultural hostilities are ever experienced coupled with harshness of life. To counter this, trust your instincts and not the position people hold in society.

12. During your stay abroad, were special events organized specifically for exchange students?

Yes No

If yes, please include descriptions: Most of the events were restricted to online avenues due to the ongoing covid-19 pandemic

ACCOMODATION, SERVICES AND EXPENCES

13. Where did you actually live during your stay abroad?

Student dormitory Hotel / boarding house / guest house Room in a private apartment
 Private apartment Shared apartment with other students

14. Who helped you find living accommodation?

Host institution Friends/family
 Broker Other:

15. What quality of support did the host institution give in the search for accommodation?

(1 = bad to 5 = excellent)

1 2 3 4 5

16. How would you rank the accommodation?

(1 = bad to 5 = excellent)

1 2 3 4 5

17. To which extent were student resources available to you? (libraries, computer labs, laboratories, facilities, etc.)?

(1 = not at all bis 5 = very good)

1 2 3 4 5

18. How was the computer and internet access?

(1 = bad bis 5 = very good)

1 2 3 4 5

19. Monthly expenditure during the course of the stay abroad (in Euros):

Travel expenses (for one way there and back):650

Monthly expenditure (incl. accommodation): 310, spent on:

- 50 Accommodation
- 110 Maintenance
- 150 Commuting expenses

OVERALL ASSESSMENT

20. Evaluate your stay in an academic sense:

(1 = bad to 5 = excellent)

1 2 3 4 5

21. Evaluate your stay in a personal sense:

(1 = bad to 5 = excellent)

1 2 3 4 5

22. Which aspects of your study abroad stay did you most enjoy?**In an academic sense:**

Diverse opportunities to participate and explore ongoing research projects and vast interactions with both junior and senior researchers.

In a socio-cultural sense:

I was able to partake in different sociocultural activities both academic wise and societal wise, where I got to learn and shared more of my knowledge and appreciated the traditional knowledge.

23. Did you have any problems during this study abroad stay?

Challenges are part of daily life experiences aimed at sharpening and opening ones mindset in how to view and address issues. Most of challenges came in with the restrictions pertaining to Covid-19 regulations where access to most of the research facilities were minimized, however minimal access was granted and maximization was necessary to achieve the research objectives.

24. Did the fact that you studied abroad cause you to have to study at BOKU longer?

Yes No I don't no

If so, why?

25. In your opinion, how can the KUWI scholarship program improve upon itself?

The scholarship provision is doing its best, and to fully maximize not only on academic growth but also promote sociocultural growth, a specific funding component could be included where students get to exercise, learn and share their sociocultural responsibility. This will help one to achieve complete growth.

Publication of this report

I agree that this report, including the above data (field of study, host university, year of study, length of stay), will be published on the website of BOKU- International Relations for the purpose of exchanging information on the study visit, so that future interested outgoings can be informed about your experience at the host institution.

The consent is voluntary and can be withdrawn at any time in the future without giving reasons. Any revocation can be declared at any time by e-mail to kuwi@boku.ac.at.:

Yes No

Research Report

(Brief report of stay abroad from scientific point of view, ca. 1 page)

Aquaculture is an important sector which contributes to food security, income generation (FAO, 2020; Rothuis et al., 2014), poverty reduction and provide nutritional benefits in developing countries (Allison, 2011). Coastal aquaculture is key in providing for livelihoods, employment and boosting local economy among the coastal communities as observed in many developing countries. In Africa, most of the countries are far much behind despite significant efforts and projections of the initiative at both regional and national levels (FAO, 2020). Along the Kenyan coast, 70% of aquaculture activities are done on a small scale and mainly by community groups who venture into brackish water aquaculture (Mirera, 2011). However, marine aquaculture has depended on wild seed collection due to lack of established hatcheries (Mirera, 2009), leading to the introduction of Nile tilapia in brackish environments. The ability of tilapia to grow and breed in saline environment (Watanabe et al., 1989a) could be a solution to the lack of seeds for stocking marine culture facilities.

A major concern of *O. niloticus* in pond culture systems is the rapid reproduction resulting to over-population resulting to reduced growth rate, lower harvesting yields and higher chances of inbreeding. This has called for all-male tilapia production as a control of the reproductive activity and to realize yields (Omasaki, 2017). Male tilapias grow faster than females as they have better feed conversion ratio and relatively higher survival (Angienda et al., 2010) and also have a faster growth since metabolic energy is channeled towards growth by benefiting from anabolism enhancing androgens (Tran-Duy et al., 2008; Angienda et al., 2010; Khater, 2017). All-male productions are made possible through treating fry with methyltestosterone hormone (Fuentes-Silva et al., 2013). Several studies on sex reversal techniques have been conducted and proven to be working (Gale et al., 1995, 1999). Mostly widely used hormone, 17 α -Methyltestosterone (MT) (Singh et al., 2018) and common feeding technique of incorporating the MT hormone in feeds and administered to fry have been extensively established. However, due to the shortcomings of the feeding technique of health and environmental hazards (Gale et al., 1999), focus has been diverted to fry immersion in achieving sex reversal (Gale et al., 1995, 1999; Fitzpatrick et al., 1998; Srisakultiew and Kamonrat, 2013; Singh et al., 2018) with results as high as 93 % masculinization.

The aim of this study was to conduct a comparative assessment of the growth performance of sex reversed Nile tilapia by fry immersion in fresh and marine water. The laboratory phase was conducted in KMFRI-Mombasa and field phase in Bamba water company-Mtwapa (freshwater setup) and Kibokoni community group-Kilifi (Marine water setup). The research work was conducted for a period of 3 months. Main activities during the laboratory phase included breeding, feeding and monitoring of broodstock for fry production. Conducting of the fry immersion technique, monitoring of the fry and artemia processing for feeding. Water quality monitoring and weekly sampling was paramount in the study. Field setup was mainly conducted for the freshwater setup after numerous breakdowns in the marine setup. The field phase involved installation of culturing and monitoring units (hapa nets) in a liner pond, feeding on commercial feeds of 35 % Crude protein content three times a day, water quality monitoring and weekly sampling of the fish to determine their growth parameters.

Thank you for your help!