### FLORA NAMU CURRICULUM VITAE

I am a terrestrial ecologist with a multidisciplinary approach to natural resource management and conservation. I am particularly keen on ecosystem approach to conservation and protection of natural resources, biodiversity and the environment. To reduce pressure on natural resources and maintenance of ecological linkages, I am keen on community environmental education, livelihood improvement, and protection of ecosystem goods and services. Nature based innovations to improve human life and initiatives which enhance resilience and diversify community livelihoods as they adapt and mitigate against climate change are of interest to me. I work in different landscapes ranging from urban, agroecosystems, savannas, forests among others.

### **PERSONAL DETAILS:**

SURNAME: Namu
OTHER NAMES: Flora
NATIONALITY: Kenyan

WORK ADRESS:
P.O Box 1957, 10101, Karatina, Kenya
fnamu@karu.ac.ke, fnnamu@yahoo.com
Languages:
English, Kiswahili, German and Vernacular (s)

#### Find My details on:

https://scholar.google.com/citations?user=-Qi1QW8AAAAJ&hl=en https://www.researchgate.net/profile/Flora-Namu-2

https://independent.academia.edu/DrFloraNamu

#### **EDUCATION BACKGROUND:**

**UNIVERSITY OF BONN** 

April 2005- 2008 PhD studies: Conservation in Cultural Landscapes

Institute for Crop Science and Resource Conservation (INRES) University of Bonn, Department: Ecology of

cultural landscape

**UNIVERSITY OF NAIROBI** 

October 2002- September 2004 Master of Science degree in Biology of Conservation

October 1997- August 2001 Bachelor of Science degree

### **PROFESSIONAL COURSES**

- DISASTERS AND ECOSYSTEMS: RESILIENCE IN A CHANGING CLIMATE MOOC (PROFESSIONAL TRACK): Developed and delivered by United Nations Environment Program (UN Environment) and TH Koeln- University of Applied Sciences. 2018
- 2. DISASTERS AND ECOSYSTEMS: RESILIENCE IN A CHANGING CLIMATE MOOC (LEADERSHIP TRACK): Developed and delivered by United Nations Environment Program (UN Environment) and TH Koeln- University of Applied Sciences. 2017
- 3. The Ecosystem Approach and Systems Thinking-MOOC (Foundations): Developed and delivered by United Nations Environment Program (UN Environment) and TH Koeln-University of Applied Sciences. 2016
- 4. Integrated Watershed Management by utilisation of modern ICT and Participatory GIS 2016 July Jinja, Uganda
- 5. E-Learning & Participatory Geographic Information Systems" PGIS Tools for E-Learning": March Jinja Uganda
- 6. German language at Zentrum für Internationale Bildung und Kulturaustausch: Kreuzberg, Bonn- Germany October 2004- March 2005

## **WORK EXPERIENCE**

**2023-To Date** Dean: School of Natural Resources and Environmental Studies

**2016 to 2023** School Representative: Directorate of Research

Innovation and Extension Committee (DRIE)

**2018 to 2021:** School Representative: Directorate of University Industrial

Linkages and International programs (DUILIP)

**2019 to 2021:** School Representative: Directorate of Resource

Mobilization (DoRM)

**2012- 2013** Acting Dean: School of Natural Resources Management

and Environmental Studies.

2012-2013 Head of Natural Resources Management Department
 2011 to Date Lecturer: Karatina University, School of Natural Resources

Management and Environmental Studies. Department of

**Natural Resources Management** 

2005-2008 University of Bonn, Department: Ecology of cultural landscape2002-2004 Invertebrates Zoology Department National Museums of

Kenya and University of Nairobi

**2000:** Department of Ornithology National Museums of Kenya

# STUDENTS EXAMINATION AND SUPERVISION

Internal and External examiner for postgraduates since 2015 Member of Postgraduate Board of Examiners since 2015 Supervised several undergraduate and postgraduate students

# **REVIEWER**

- 1. AESA/RISE- Post Doc Fellowship reviewer
- 2. BEE World reviewer
- 3. Competitive Fund for Regional Initiative in Science and Education (RISE) Graduates for the Creation, Expansion, or Improvement of University-based Research Groups
- 4. Directorate of Research, Innovations and Extensions Proposal reviewer
- 5. Journal of Agriculture, Science and Technology reviewer

### **PROJECTS AND RESEARCH**

**2020 to date** Pollinator Diversity and Networks in urban-managed farmland and

Green Spaces in Nyeri County, Kenya

2015 to 2018 Using bee-hive fences to control crop raiding elephants in

small scale farmlands in Mwakoma village, Sagalla, Voi County,

Kenya

**2017 to 2021** Pollinator and natural enemies' protection from pesticides

through Bio-vectoring technology using managed bees (Honeybees and stingless bees) for improved agricultural

productivity and environmental health

**2015 to 2016** Assessment of the status of IFAD- UTaNRM (Upper Tana River

Natural Resources Management Project) funded livelihood improvement bee-keeping and fish farming project in Meru,

Ntharaka-Nithi, Embu, Kirinyaga, Muranga and Nyeri counties in

Kenya

2012-2016 Establishment of fish farming as a nature-based project to

> diversify livelihoods for rural communities to reduce pressure on natural resource while enhancing adaptation towards climate

change, Karatina University-Kenya

2009 to May 2011: Integrated community conservation of biodiversity in agro-

ecosystems adjacent to the eastern side of Mount Kenya

forest, Kenya

October 2005-July 2006 Ecology of stingless bees and their possible role in the

spread of Banana Xanthomonas Wilt in Uganda

The nesting biology of the stingless bees; *Plebeina* hildebranti and Hypotrigona gribodoi (Hymenoptera-

Apidae- Meliponini) in Uganda

October 2003-May 2004 Effects of forest disturbance on butterfly diversity in

Kakamega forest, Western Kenya

2002: Monitoring the diversity of butterflies and moths in

Kakamega forest, Western Kenya

2001: Monitoring breeding and paternity in blue monkeys

Cercopithecus sp in Kakamega forest, Western Kenya.

2000-2001: Ecology of the Blue headed Bee eater, Merops muelleri, in

Kakamega forest, Western Kenya

### **GRANTS**

1. 2020: Global Challenges Research Fund Networking Grants- Pollinators and pollination services in urban Sub-Saharan Africa: Knowledge gaps and research priorities

- 2. 2017: Kenya National Research Fund grant: Pollinator and natural enemies' protection from pesticides through Bio-vectoring technology using managed bees (Honeybees and stingless bees) for improved agricultural productivity and environmental health
- 3. 2015-2016: Upper Tana River Natural Resources Management Project- Kenya to assess the performance of IFAD-UTaNRM funded livelihood improvement bee-keeping and fish farming project and to establish demonstration farms

- 4. 2014-2015: Save the elephants, elephants and bees project to determine the possible impacts of introducing honey bee hive-fences around farmlands on diversity and distribution of other flower visitors and their forage plants in Mwakoma village, Sigalla, Voi County
- 5. 2012-2016: World Bank through the Natural Resource Management Project- Kenya, Upper Tana River Catchment-Livelihood Component to establish Fish farming within Karatina University. Diversifying livelihoods as an adaptation towards climate change
- 6. 2009-2010: Rufford Small Grant Foundation- for Nature Conservation to enhance integrated community conservation of biodiversity in agro-ecosystems adjacent to the eastern side of Mount Kenya forest, Kenya. Steps towards climate change adaptation and mitigation.
- 7. 2005: Germany government through KAAD and BIOTA to conduct field work in Uganda to determine the possible role of stingless bees in the spread of Banana *Xanthomonas Wilt*. An application of the ecological principle of home ranges to promote food security in the face of climate change challenges.
- 8. 2002: Germany government through BIOTA, for monitoring the diversity of butterflies and the effects of forest disturbance on butterfly diversity in Kakamega forest, Western Kenya.
- 9. 2001. Royal Society for the protection of Birds (RSPB) through NMK, for the study of the; Ecology of the Blue headed bee-eater *Merops muelleri* in Kakamega Forest Western Kenya

# **MEMBERSHIP TO CLUBS, COMMITTEES AND SOCIETIES**

- 1. Member of Ecological Society of East Africa (ESEA)
- 2. Member of East Africa Natural History Society (EANHS-Nature Kenya)
- 3. Member of Entomological Society of Kenya
- 4. Friend of the Nature Club Karatina University
- 5. Friend of the Aquaculture Club Karatina University
- 6. Save the Elephant
- 7. Katholischer Akademischer Ausländer-Dienst (KAAD)-Kenya
- 8. Member of Several Committees within the University

### **PUBLICATIONS AND CONFERENCES**

#### **Publications**

1. Nderitu J., Kamiri H. and Namu F. (2022). Assessment Of Soil Carbon and Ph Under Forest Stands and Adjacent Farmlands in a Micro-Tropical Forest In Machakos County,

- Journal of Research in Forestry, Wildlife & Environment Vol. 14(3) September, 2022 ISBN: 2141 1778
- 2. Namu F.N. and Wittman D. (2016). An African Stingless bee *Plebeina hildebrandti* Friese Nest Size and Design (Apidae, Meliponini). Afr. J. Ecol., 55, 111–114
- 3. Namu F.N. and Wittman D. (2014). Are stingless bees the primary vector in spread of banana Xanthomonas wilt in Central Uganda? International Journal of Ecology and Ecosolution Vol. 1(2), pp. 52-60
- 4. Namu F.N. and Kirika M.J. (2013). Community Awareness of Indeginous and Drought Resistant Crops &Trees on the Eastern Side of Mt. Kenya Forest: an Adaption Strategy to Climate Change Land Use and Nature Conservation. Proceedings of the 2<sup>nd</sup> International Workshop of the Quality Network Biodiversity in Sub-Sahara Africa 2012, ISSN 0947 – 0360, Berlin, Germany
- Namu F.N., Githaiga J. M., Kioko E. N., Ndegwa P. N. and Häuser C. L. (2008). Butterfly species composition and abundance in an old, middle-aged, and young secondary forests, in: Kühne L. (Ed.), Butterflies and moth diversity of the Kakamega forest (Kenya), Brandenburgische Universitätsdruckerei und Verlagsgesellschaft mbH, Germany, pp 47-61
- 6. Namu F.N., Githaiga J. M., Kioko E. N., Ndegwa P. N., Häuser C. L. and Kühn L. (2007). The butterfly, *Hypolimnas salmacis magnifica* (Drury, 1773) in Kakamega Forest National Reserve (KFNR) Kenya. *Metamorphosis* Vol. 18, no. 4, pp142-143
- 7. Namu F. N and Wittmann D. (2007). Banana Bacterial Wilt in East Africa: Are stingless bees' vectors of *Xanthomonas campestris pv. Musacearum. Apidologie* Vol.38
- 8. Namu F.N. and Wittmann D.(2007). Nest architecture in the stingless bees (*Plebeina hildebradti*) inhabiting termite mounds in Uganda. *Apidologie* Vol.38
- 9. Namu F.N. and Wittmann D. (2007). Nest architecture of *Hypotrigona gribodoi* Magretti (Hymenoptera-Meliponini) nesting in mud walls and tree cavities in Central Uganda. In: Kirchner W. H. (editor) The Individual and the Group in Insect Societies. Proceedings of the 20th. Meeting of the German-speaking Section of the International Union for the study of Social Insects. Bochum Germany
- 10. Namu F.N. (2004). Effects of forest disturbance on butterfly diversity in Kakamega Forest Nature Reserve Kenya. In: Huber, B.A (ed): 5<sup>th</sup> International Symposium on Tropical Biology- Africa Biodiversity:Molecules, Organisms Ecosystems. Bonn; P.106
- 11. Haüser C., Kühne L., Njeri F. and Holstein J. (2003). Lepidoptera as indicators of human impact of tropical rainforest ecosystems in Eastern Africa. In: Federal Ministry of

Education and Research (BMBF)and German Aerospace Center Project Management (DLR-PT) (eds). Sustainable use and conservation of biological diversity. A challenge for society. International Symposium, 1-4 Dec.2003, Berlin. Symposium Report, Part A. Deutsches Zentrum für Luft und Raumfahrt, projectträger des BMBF (DLR-PT), Bonn:pp 110-111

12. Kirika J.M. and Namu F.N. (2008-2011). To enhance integrated community conservation of biodiversity in agro-ecosystems adjacent to the eastern side of Mount Kenya forest, Kenya. Project report. In: http://www.rufford.org/rsg

### Reports

- Enhancing pollination services in Kenyan and Ethiopian urban greenspaces for food production, sustainable development and human health and wellbeing. Pilot data collection of plant-pollinator interactions and floral resources in urban greenspaces in Nairobi and Nyeri, Kenya and Addis Ababa, Ethiopia. A Preliminary Study of Pollinators and their Floral Resources in an Urban Farmland and Urban Managed Green Spaces in Nyeri County, Kenya 2022
- 2. Self-explanatory E-learning resources for teaching integrated watershed management using PGIs tools and ICT- Video Produced on You Tube. August 2016
- Status of IFAD- UTaNRM (Upper Tana River Natural Resources Management Project)
  funded livelihood improvement bee-keeping and fish farming project in Meru,
  Ntharaka-Nithi, Embu, Kirinyaga, Muranga and Nyeri counties in Kenya. Reported
  submitted to Upper Tana Natural Resources Management Project (UTaNRM)-Ministry of
  Environment Kenya in May 2016
- 4. Comparison of Bee Families and their abundances in smallholder fenced and unfenced farms with live bee hive fences: Preliminary results of the bee monitoring in the Elephants and Bees Project. Area in Kishamba B Community Ranch, Mwakoma village, Sagalla Location, Taita Taveta County. Report submitted to Elephants and Bees Project in 2016
- 5. Bee forage species richness and seasonality in bee hive fenced and unfenced smallholder farms Preliminary results of bee forage documentation in the Elephants and Bees Project Area in Kishamba B Community Ranch, Mwakoma village, Sagalla Location, Taita Taveta County. Report submitted to Elephants and Bees Project in July 2015

### **Conferences**

 Flora Namu, Jane Macharia, Geoffrey Wambugu, Katherine Baldock, Martin Malit, Irene Agango, Dube Sora, Beatrice Dale, Mark Goddard, Matthew Pound, Rebecca Karanja, Wanja Kinuthia. Unveiling the buzz-worthy world of urban insect havens: Exploring pollinator diversity and networks in urban green spaces in Nyeri town, Kenya. British Ecological Society, ICC Belfast, Northern Ireland, 12-13 December 2023 (Virtual)

- 2. Flora Namu, 2023 Erasmus+ Programme Regional Information Sessions for Sub-Saharan Africa December 2023, Dec 13, 2023 12:00 Nairobi (Virtual).
- 3. Flora Namu, 2023, EURAXESS Africa Strengthening the entrepreneurial capacities of Research and Innovation projects December 6, 2023 Nairobi (Virtual).
- 4. Flora N. Namu, Geofrey Wambugu, Martin Malit, Irene Agango, Dube Sora, Beatrice E. Dale, Mark A. Goddard, Matthew J. Pound, Rebecca Karanja, Wanja Kinuthia, Jane Macharia, Yitbarek Woldehawariat, Kumelachew Yeshitela, Katherine C. R. Baldock (2022) Pollinator islands in urban environments: A case study of pollinator Diversity and Networks in urban-managed farmland and green spaces in Nyeri Town, Kenya. Workshop-Tropical Biology Association Mpala Kenya 15th August 2022
- 5. Katherine Baldock et al., (2022) Conservation opportunities for pollinators in urban landscapes. Accra Ghana, March 2022
- 6. "Insect Havens" in urban environments: A case study of pollinator Diversity and Networks in urban-managed farmland and green spaces in Nyeri Town, Kenya. Geoffrey Wambugu, Flora Namu, Martin Malit, Irene Agango, Dube Sora, Beatrice E. Dale, Mark A. Goddard, Matthew J. Pound, Rebecca Karanja, Wanja Kinuthia, Jane Macharia, Yitbarek Woldehawariat, Kumelachew Yeshitela, Katherine C. R. Baldock . Karatina University-DAAD Workshop, November 2021.
- 7. Namu F.N. (2016). Challenges to Sustainable Development Goals and possible solutions with examples from Karatina University. International DAAD Alumni Seminar: Waste, Water & Energy-Environmental and Supply Chain Management We Chain III. University of Duisburg-Essen June 2016
- 8. Okello J.Esborn, Flora N. Namu, Margaret Waweru, Charles Gatune and Josephine Njambuya (2016): Solid Waste Management in Karatina University: International DAAD Alumni Seminar; Waste, Water & Energy- Environmental and Supply Chain Management WE Chain III. University of Duisburg-Essen June 2016 and IFAT 2016
- Namu F.N. and Wittman D. (2014). What if an important pollinator is considered a vector-The case of Banana Xanthomonas Wilt in Uganda. Proceedings, First National Pollination Management Conference, June 10-11<sup>th</sup>, 2014. The Kenya Pollination Project Initiative
- 10. Makori B.A., Namu F.N., and Kimuyu D.M. (2014). Determination of bird friendly farming in Mathira West, Nyeri County. First National Pollination Management Conference, June 10-11<sup>th</sup>, 2014. The Kenya Pollination Project Initiative
- 11. Ochieng L. and Namu F.N. Impacts of bee keeping on local livelihoods and environmental conservation in Masai Mara, Narok Couty. First National Pollination Management Conference, June 10-11<sup>th</sup>, 2014. The Kenya Pollination Project Initiative

- 12. Namu F.N and Kirika M.J. (2012). Community Awareness of Indeginous and Drought Resistant Crops & Trees on the Eastern Side of Mt. Kenya Forest: An Adaption Strategy to Climate Change Land Use and Nature Conservation. Proceedings of the 2<sup>nd</sup> International Workshop of the Quality Network Biodiversity in Sub-Sahara Africa. Held in Karatina University, Karatina Kenya 2012.
- 13. Namu F. N and Wittmann D. (2007). Banana Bacterial Wilt in East Africa: Are stingless bees' vectors of *Xanthomonas campestris pv. musacearum* 54. Jahrestagung der Arbeitsgemeinshaft der Institute für Bienen forschung in Veitshöchheim vom 27-29 March 2007. Würzburg Germany
- 14. Namu F. N (2004). Diversity, nesting and feeding ecology of stingless bees in Kakamega forest Kenya. BIOTA East Pollination Seminar 30 September National Museums of Kenya, Nairobi

#### **Posters**

- Namu F.N., Kirika M.J. and Wahungu G.M. (2012). Conservation of Indicator Species in Agro-ecosystems on the Eastern Side on Mt.Kenya Forest. Karatina University 1<sup>St</sup> International Conference on Natural Resources, Peace and Conflicts, July 2012, Karatina Kenya.
- 2. Namu F.N., Kirika M.J. and Wahungu G.M. (2012). Community Education, Bee keeping and Tree planting: An Incentive to biodiversity conservation in agroecosystems adjacent to the eastern side of Mt.Kenya Forest. Karatina University 1<sup>St</sup> International Conference on Natural Resources, Peace and Conflicts, July 2012, Karatina Kenya.
- 3. Namu F.N. and Wittmann D. (2007). Nest architecture of *Hypotrigona gribodoi* Magretti (Hymenoptera-Meliponini) nesting in mud walls and tree cavities in Central Uganda. 20th. Meeting of the German-speaking Section of the International Union for the study of Social Insects (IUSSI) from 26th-28th September, Bochum Germany
- 4. Namu F.N. and Wittmann D. (2007). Nest architecture in the stingless bees (*Plebeina hildebradti*) inhabiting termite mounds in Uganda. 54. Jahrestagung der Arbeitsgemeinshaft der Institute für Bienen forschung in Veitshöchheim vom 27th-29th March , Würzburg, Germany
- 5. Namu F.N and Wittmann D. (2007). Banana Xanthomonas Wilt in Uganda: How far can stingless bees spread *Xanthomonas campestris musaceaurum (Xcm)*. 20<sup>th</sup> Annual Meeting of the society for Tropical Ecology. Tropical Diversity in the Anthropocene. 21-25 February, Bonn, Germany
- 6. Namu F.N and Wittmann D. (2007). Banana Xanthomonas Wilt disease in Uganda: The possible role of stingless bees in the spread of *Xanthomonas campestris pv. musacearum*

- (*Xcm*). 20<sup>th</sup> Annual Meeting of the society for Tropical Ecology. Tropical Diversity in the Anthropocene 21-25 February, Bonn, Germany
- 7. Namu F.N. Wittmann D. Gold C. Tinzaara W. and Sikora R. (2006). Diversity, nesting sites and nest architecture of stingless bees visiting bananas in Uganda (Hymenoptera, Apidae, Meliponini). Scientific conference: Biodiversity in inhabited areas of Eastern Africa. 19th-21st July. Makerere University, Kampala, Uganda.
- 8. Namu F.N. Kioko E. N. Githaiga J. M. and Häuser C. L. (2004). Effects of forest disturbance on butterfly diversity in Kakamega Forest Nature Reserve Kenya. 5th International Symposium on Tropical Biology-Africa Biodiversity: Molecules, Organisms Ecosystems. 2nd-6th May Bonn, Germany
- Mwangi M. et. al. (2006) Comparative study of banana Xanthomonas wilt spread in mid and high altitudes of the Great Lakes region of Africa. Tropentag, University of Bonn, October 11-13,2006

# Workshops, Seminars and Trainings Attended and Participated in.

- 1. Productivity trainings held within the University in year 2023 and 2024.
- 2. Empowering community beekeepers with modern technologies in Embu County, 2022
- 3. Mainstreaming Science Technology and Innovations, NACOSTI 2022, Kenya.
- 4. Mentorship training held on 26<sup>th</sup> September 2017, Karatina, Kenya
- 5. Development of cross-border biodiversity workshop held on August 2017 in ICRAF/WAC, Kenya
- 6. Grant proposal writing training held on 24<sup>th</sup> to 30<sup>th</sup> October 2016 in Karatina University Main Campus, Kenya
- 7. International DAAD Alumni Seminar on Water, Waste & Energy Environmental and Supply Chain Management (WE-Chain II) and IFAT- Word Water Fair held on 23rd 28th May 2016 in Essen and Munich Germany
- 8. International DAAD Alumni Expert seminar on Integrated solutions to food insecurity: 1<sup>st</sup> to 12th March 2016, Mekelle, Tigray, Ethiopia
- 9. Participatory GIS & E-Learning Workshop II: 2nd to 6th November 2015, Kimunye (Mount Kenya), Kenya
- 10. Integrated Watershed Management for Urban Water Security 4<sup>th</sup> Workshop: 30th November to 4th December 2015, Mbale Uganda
- 11. International DAAD Alumni Expert Seminar on integrated solutions to answer challenges of food insecurity in times of climate change: learning from experiences of the Abreha we Atsbeha IWM project, Tigray Regional State, 14th to 25th April 2015, Mekelle, Ethiopia

- 12. DAAD Alumni Winter School "Organic farming the silver bullet for boosting development and sustainability?" and "BioFach" World Organic Trade Fair: 2<sup>nd</sup> to 14th February, 2015, Stuttgart Hohenheim and Nuremberg, Germany
- 13. 2<sup>nd</sup> Afrotropical Lepidoptera Workshop: 18th to 25th October 2014, Makerere University Biological Field Station in Kibale National Park, Uganda
- 14. DAAD Workshop: Land Use and Nature Conservation –2<sup>nd</sup> International Workshop of the Quality Network Biodiversity in Sub-Sahara Africa 2012- Karatina, Kenya
- 15. Guelph East Africa Connections: Facing a Sustainable Future Together Workshop, January 2013, Tanzania
- 16. 1st Laikipia Environmental Educators Stakeholders Workshop, on 19th to 21<sup>st</sup> June 2013 in Old House Hotel Nanyuki, Kenya
- 17. WRMA- Ragati WRUA- Upper Tana Conservation, May 2014, Ragati, Karatina, Kenya
- 18. WRMA-TEEB STUDY-Stakeholders meeting on Assessment of Ecosystem Status and Evaluation of Ecosystem services- Tana basin held on 25<sup>th</sup> March 2014, Embu, Kenya
- 19. Changing gender roles in Sub-Saharan Horticultural family farming held in Kenya and Tanzania, 19-28<sup>th</sup> August 2013

#### **REFEREES:**

- Prof. Charles C. Ngugi
   Karatina University
   P.O Box 1957-10101, Karatina <a href="mailto:cngugi@karu.ac.ke">cngugi@karu.ac.ke</a>
- Prof. Dr. Dieter Wittmann
   Institut für Nutzpflanzenwissenschaften und Ressourcenschutz Lehr- und Forschungsbereich Ökologie der Kulturlandschaften Tierökologie Melbweg 42
   53127 Bonn wittmamm.bonn@gmx.de
- Dr. Esther. Kioko
   National Museums of Kenya
   Museum Hill Road
   P.O. Box 40658-00100 Nairobi, Kenya
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