# TAREKEGN ARGAW

#### Researcher

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Addis Ababa, Ethiopia

@Tarekegn



### **EXPERIENCE**

#### Researcher I

#### **Ethiopian Institute of Agricultural Research**

Apr 2020 - present

Addis Ababa, Ethiopia

- Advanced designs of experiments, conduct P-rep design for early generation and large field trials.
- Conduct spatial and pedigree analysis
- Crop modeling
- Multi-enviroment trial (MET) data analysis using enhanced statistical models
- Trainig on statistical method and computing software for crop breeder
- Crop breeding trials data management
- Developments of new research proposals.
- Implementing, follow up and M&E biometrics research projects.
- Lead and manage biometrics research team
- · Writing technical publications and reports

#### Assistant Researcher

#### Jimma Agricultural Research Center

₩ Feb 2013 - Apr 2019

- Coordinating Biometry, GIS, and Agro-meteorology team
- Implementing research activities.
- Generating design of experments for field trials.
- Managing crop breeding trials dataset
- Cunducting data analysis for genotypes selection at each trial stage

# **PROJECTS**

- Modernizing Ethiopian Research crop improvement.
- Improving accuracy of genotype evaluation in perennial crop breeding research through statistical and ICT solutions.
- Basic and advanced data management and analysis manual for training and reference using R software.
- Estimation of soil variability, optimum plot size and shapes and number of replications for Soya Bean.
- Improving precision of trials in experiments at national agricultural research system.
- Analysis of repeated measure data from livestock research .
- Integrated Analysis Methods and R Scripts for population genetic data.

# PROFESSIONAL MEMBERSHIP

- Member of International Biometric Society (IBS)
- Member Ethiopian Statistical Association (ESA)
- Member of Crop Science Society of Ethiopia (CSSE)

# **PUBLICATION**

#### **UNDER REVIEW MANUSCRIPT AND PREPRINTS**

### RESEARCH INTEREST

- Improving multi-environment trials (MET) data analysis using enhanced statistical models
- Computer programming, Mixed model statistics, Experimental design
- Crop Growth Modeling

### **ACHIEVEMENTS**

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Fitting enhanced statistical models to unbalnced large dataset using ASreml-R



Coordinator of biometrics Research Team at EIAR



Statistical methods and software training for agricultural researchers

### **PROGRAMMING SKILL**

R
ASReml-R
SAS
SPSS
STATA
LaTex
Genstat
Python
AcrGIS
Minitab

# **LANGUAGE**

Amharic English



# **EDUCATION**

Master of Science with Honors in Biostatistics

im Jimma University

**2014 - 2016** 

Ethiopia

@ ero@ju.edu.et

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Bachelor of Science in Statistics

Addis Ababa University

**2009 - 2011** 

**♥** Ethiopia

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- Multi-environment Trials Data Analysis: Linear Mixed Model-based Approaches Using Spatial and Factor Analytic Models, at Frontiers
- Factor Analytic Mixed Model Analysis for Multi-Environmental Trials data, at Ethiopian Journal of Crop Science

#### **PUBLISHED ARTICLES**

- Argaw T, Fenta BA, Assefa E. (2024). <u>Application of factor analytic and spatial mixed models for the analysis of multi-environment trials in common bean (Phaseolus vulgaris L.) in Ethiopia.</u> Plos one, 19(4), e0301534
- Tesfaye K, Alemu T, Argaw T, de Villiers S, Assefa E. 2023. <u>Evaluation of finger millet (Eleusine coracana (L.) Gaertn.) in multi-environment trials using enhanced statistical models</u>. Plos one 18(2), e0277499;
- Woldemeskel TA, Fenta BA. 2022. <u>Spatial Mixed Model Analysis in Varietal Selection Field Trials</u>. Ethiopian Journal of Crop Science 9(2), print ISSN: 2072-8506
- Argaw T, Taye G, Bedada D, Ayano A. 2018. <u>Longitudinal Analysis of Arabica Coffee Bean Yield: Application of Linear Mixed Model for Clustered Longitudinal Data</u>. Acad. Res. J. Agri. Sci. Res. 6(7), pp. 370-379; http://doi.org/10.14662/ARJASR2018.049
- Argaw T, Taye G. 2018. Genotype by Environment Interaction Analysis of Arabica Coffee Bean Yield. Acad. Res. J. Agri. Sci. Res. 6(8), pp. 509-519; http://doi.org/10.14662/ARJASR2018.090
- Belete Y, Argaw T. 2015. Genetic Variation and Extent of Heritability of the Various Agronomic Traits of Arabica Coffee (Coffea Arabica L.) Genotypes Grown across different Environments in Ethiopia. Greener J. Agron. Forestry Horti. 3(1), pp. 001-010; http://doi.org/10.15580/GJAFH.2015.1.061614271
- Woldu Z, Mohammed A, Belew D, Bekelle Y, Aragaw T. 2015 <u>Combined</u> <u>Effects of 1-MCP and Export Packaging on Quality and Shelf-life of</u> Cavendish Banana (Musa sp.). Food Science and Quality Management 45, pp.
- Adane ZW, Ibrahim AM, Yohannes DB, WoldeMeskel TA. 2015 Effect of traditional kerosene smoking and ethrel on ripening, shelf life and quality of Cavendish banana (Musa sp.). African Journal of Agricultural Research 10(50), pp. 4570-4583; http://doi.org/10.5897/AJAR2015.10299

### **CERTIFICATES**

- Enhance Use of Climate Services for Agricultural Research and Development: Navigation and Use of ENACT Maproom
  - February 17-21, 2020
- **♀** EIAR, Ethiopia
- Manage Soil and Agronomy Data Portal

62-77; https://doi.org/10.7176/FSQM

- Movember 2-4, 2020
- ♥ EIAR, Ethiopia
- Participated as Trainer on Basic Statistic and Computing Software
   January 18- 19, 2018
  - Yabello Pastoral and Dry Land Agricultural Research Center/Ethiopia
- Panel Data Modeling and Impact Evaluation Methods Using STATA
  - 🛗 June 14-23, 2017
- PEIAR, Ethiopia
- Introduction to Geographical Information System (GIS)
  - March 18-22, 2013
- ♥ Jimma Universty,Ethiopia

## **STRENGTHS**

Communication Skills

Comited and hardworking

Computer skills

Transferable skills

Attention to detail

Patience

Reporting skill

## **REFERENCES**

#### **Dr. Ermias Betemariam**

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Land health scientist, Land and soil health theme,CIFOR-ICRAF Adjunct Assistant Professor of Natural Resource and Computational Sciences, Addis Ababa University

#### Dr. Berhanu Amsalu Fenta

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- 436 Adama, Ethiopia

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Senior Researcher

Coordinator, National Lowland Pulse Research Prog Ethiopian Institute of Agricultural Research

Adama, **?** Ethiopia

### Dr. Girma Mamo Diga

- @ mamogirma2018@gmail.com
- 2003 Addis Ababa

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Senior Researcher

Director, Climate, Geospatial and Biometrics Resea Directorate(CGBRD)

Ethiopian Institute of Agricultural Research Addis Ababa, **?** Ethiopia

#### Dr. Girma Taye Awoke

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Associate Professor of Biostatistics, School of Publ Addis Ababa University

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