

## **Characterization of major anchote producing areas of Ethiopia**

**Dest a Fekadu Mijena<sup>1,2</sup>, Sentayehu Alamerew<sup>2</sup>, Kibebew Assefa<sup>1</sup> and Mandefro Nigusse<sup>3</sup>**

<sup>1</sup>Ethiopian Institute of Agricultural Research, Bishoftu, Ethiopia

<sup>2</sup>Jimma University, Jimma, Ethiopia

<sup>3</sup>Ethiopian Institute of Agricultural Research, Addis Ababa, Ethiopia

**A**nchote, *Coccinia abyssinica* (Lam.) Cogn., is an annual trailing vine belonging to the Cucurbitaceae family grown principally for its tuberous root even though its tender leaves are also widely used as food. The need to promote this neglected and under-utilized crop and safeguard its diversity by characterizing the producing areas is paramount because of its nutritional, agronomic, medicinal, socio-cultural and socio-economic importance for the growers and to promote other similar areas to produce and utilize. In order to influence the wider agricultural system of Ethiopia, major anchote producing areas need to be characterized with their climatic conditions; agro-ecologies, topography and soil types using updated and latest GIS data infrastructure and Geo-processing and GIS overlay analysis, and to determine the suitable areas of production, to use in extension and popularization of anchote to other parts of Ethiopia. The major agro-ecological zones in which anchote is widely grown are identified as tepid sub-humid mid-highlands (32.43%), warm sub-humid lowlands (29.04%), tepid humid mid highlands (9.73%), warm moist lowlands (9.38%), warm humid lowlands (7.49%), and warm per-humid lowlands (6.06%). The area of major anchote producing areas cover 124,634 square kilometers with aspect of 1970 south, slope of 0.00 with an average of 60 to the maximum of 750. The lowest topography was 396 m a.s.l while the average and highest altitudes were 1590 and 3300 m. a.s.l, respectively. The major soil types of anchote growing areas were Nitisols (59.80%) and Leptosols. The identification of climatic factors of the major anchote growing areas confirms the possibility of production and utilization at similar areas of Ethiopia and shows the scope of the crop to be extended in similar agroecological conditions of Ethiopian agricultural system to advance the development of the crop and other underutilized crops.

### **Biography**

Dest a Fekadu Mijena is affiliated to Ethiopian Institute of Agricultural Research, Ethiopia. He is a recipient of many awards and grants for his valuable contributions and discoveries in major area of subject research. His international experience includes various programs, contributions and participation in different countries for diverse fields of study. His research interests reflect in his wide range of publications in various national and international journals.

---

**Received:** May 12, 2022; **Accepted:** May 16, 2022; **Published:** August 08, 2022

---