

Mar 17, 2020

# Data for manuscript: Selection of forage oat genotypes through GGE Biplot and BLUP

DOI

[dx.doi.org/10.17504/protocols.io.bdtxi6pn](https://dx.doi.org/10.17504/protocols.io.bdtxi6pn)

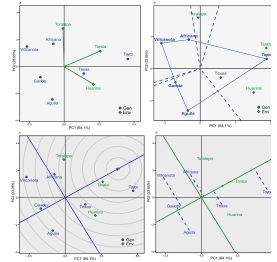
Franklin Santos<sup>1</sup>, Felix Marza<sup>1</sup>

<sup>1</sup>National Institute of Agricultural and Forestry Innovation



**Franklin Santos**

National Institute of Agricultural and Forestry Innovation



OPEN  ACCESS



DOI: [dx.doi.org/10.17504/protocols.io.bdtxi6pn](https://dx.doi.org/10.17504/protocols.io.bdtxi6pn)

External link: <https://doi.org/10.1101/2020.03.10.986422>

**Protocol Citation:** Franklin Santos, Felix Marza 2020. Data for manuscript: Selection of forage oat genotypes through GGE Biplot and BLUP. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.bdtxi6pn>

## **Manuscript citation:**

Santos, F. & Marza, F. (2020). Selection of forage oat genotypes through GGE Biplot and BLUP. **protocols.io**. [dx.doi.org/10.17504/protocols.io.bdtxi6pn](https://dx.doi.org/10.17504/protocols.io.bdtxi6pn)

**License:** This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

**Protocol status:** Working

**We use this protocol and it's working**

**Created:** March 17, 2020

**Last Modified:** March 17, 2020

**Protocol Integer ID:** 34391

**Keywords:** Avena sativa, BLUP, GGE, multi-environment (MET), stability,

## Abstract

In Bolivia, there is a low predominance of forage oat productivity. Therefore, it was proposed to select more productive and stable genotypes through statistical methods of GGE Biplot and BLUP. The research was conducted in three environments in Bolivia and six commercial varieties of forage oats were evaluated; three of them correspond to INIA Peru and the rest of Bolivia. Data were analyzed through GGE Biplot and BLUP (Best Linear Unbiased Prediction) and an average yield of  $10.29 \pm 3.51 \text{ t ha}^{-1}$  of dry matter was obtained. BLUP accumulated greater variance than GGE Biplot in the first two components. In terms of productivity and stability values, both models have the same selection trend. Thus, Tayco and Texas were selected for their outstanding characteristic in dry matter yield and phenotypic stability.

## Attachments



[Stability Data.xlsx](#)

10KB

