ABSTRACT

The availability of quality seeds in sufficient quantities, on time, and easily obtained by farmers plays an important role and this cannot be separated from the role of large seed breeders. This study aims to determine the effect of media type method on increasing seed germination performance, increasing food plant seed germination performance, interaction of media type and seed method influencing the improvement of food crop seed germination performance. The research was conducted in Kuta Blang Village, Bandar Sakti District, North Aceh Regency. The time of this research was carried out in December 2021. This research used a two-factorial completely randomized design (CRD) consisting of three treatments and three replications, namely the first factor was seed testing with different methods consisting of M1 = rolling paper media, M2 = seed germination tool, M3 = media sand + manure (2:1), and the second factor is the treatment of different types of seeds, namely B1 = corn seeds, B2 = rice seeds, and B3 = soybean seeds. The observed parameters are . Maximum Growth Potential (PTM) (%), Germination Power (DB) (%), Vigor Index (IV) (%), Seed Growth Speed (Kct) (%), and Seed Growth Simultaneity (Kst) (%). The results showed that the seed germination method showed different seed performance, the best seed germination performance was found in the seed germination method using the designed seed germination device, the use of different seeds did not affect the viability and vigor values of the seeds, the interaction between the germination method treatments and the use of seeds. Different seeds showed different viability and vigor values.

Keywords: Food Seeds, Paper Media, Seed Germination Media, and Soil Media