

THE POTENTIAL AND CHARACTERISTICS OF GENETIC RESOURCES OF 7 NATIONAL SUPERIOR RED ONION VARIETIES IN INDONESIA

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Abstract

Shallots are one of strategic Indonesian commodity that has high economic value and one of the causes of inflation. Since Indonesia has released 46 superior varieties of shallots and 7 of them come from East Java. The condition before the existence of superior varieties of shallots from specific local origins in East Java, the productivity of East Java's shallots was below 7.5 t/ha, whereas after the release of superior varieties, the productivity in 2020 was an average of 9.6 t/ha or increased. 27.63%. This activity was carried out from 2010 to 2018 in several East Java districts, namely Nganjuk, Probolinggo, Malang, Sumenep and Pamekasan. The research was carried out by characterizing the performance of 7 superior varieties namely Super Philip, Bauji, Batu Ijo, Biru Lancor, Rubaru, Monjung and Tajuk to determine the potential and characteristics of the seven varieties in various development locations. The research was conducted through a survey with purposive sampling. The vegetative and generative growth performance was observed according to the nature of the growth as well as the specific characteristics of each variety.

The results of the plant diversity and genetic potential of the 7 superior varieties showed that each variety had specific characteristics, namely Super Philip, Blue Lancor and Tajuk suitable for planting in the dry season in the lowlands to medium with the respective productivity of 18 t/ha, 16 t/ha , 19 t/ha. Whereas those that are suitable for the rainy season are Bauji, Rubaru, Monjung in the low to medium lands with respective productivity of 18 t/ha, 16 t/ha and 18 t/ha and are tolerant of *Fusarium* sp.,while Batu Ijo which has large tubers (15-20 g/tuber) suitable for the rainy and dry seasons in the highlands (800-1,500 m asl), productivity 14 t/ha and tolerant to *Fusarium* sp.

Keywords: shallots, genetic resources, characteristics, East Java