Uji Daya Hasil Pendahuluan Benih Melon (*Cucumis melo* L.) Sebagai Calon Varietas Hibrida Di PT Aditya Sentana Agro (*Preliminary Yield Test of Melon* Seed (*Cucumis melo* L.) Hybrids As A Candidate For Varieties At PT Aditya Sentana Agro). Dr. Ir. Nurul Sjamsijah, MP. as chief advisor and Wakhyono Wijaya, SP as a member advisor.

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ABSTRACT

This study aims to determine the potential of hybrid melon seeds (Cucumis melo L.) by comparing them with hybrid comparison plants at PT. Aditya Sentana Agro Malang. The research was conducted in December 2021 – February 2022. The research design used was a non-factorial randomized block design (RAK) with 13 F1 melon lines and 3 hybrid comparisons. These factors are ME 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1333 (Merlin F1), 1336 (Jumbo F1), and 1337 (Madesta F1). The data obtained from this study were analyzed by analysis of variance (ANOVA) and to find out the significant differences, the Turkey's Honeslty Significant Difference Test (BNJ) was carried out with a significant level of 5%. Parameters observed were male flowering age, female flowering age, fruit weight, harvest age, fruit circumference, fruit diameter, fruit length, flesh thickness, sweetness level, stem internode length, stem internode diameter and plant productivity. Based on the results of variance (ANOVA) it was found that the 1601 and 1602 lines had lower yields than the Merlin F1, Jumbo F1 and Madesta F1 varieties. The lines 1600, 1597, 1603, and 1604 had higher yields than the Merlin F1 variety. The lines 1592, 1594, 1598, and 1599 had higher yields than the Madesta F1 variety. The 1593, 1595, and 1596 lines had higher yields than the three comparison varieties, but the 1596 lines had a long harvest life of 69 DAP. The expected lines 1593 and 1595 had higher advantages in potential production per Ha compared to the three comparison varieties, the 1593 line was 34.86 tons/Ha and the 1595 line was 38.06 tons/Ha. In addition, it also excels in fruit sweetness, namely the 1593 strain with a yield of 9.42°Brix and the 1595 strain with a yield of 9.26°Brix. This means that this line is better than the other tested lines, so it has a greater chance of being released as a candidate variety

Keywords: hybrid, seed, variety, production potential