عنوان مقاله:

Comparison of Some Economic Traits in Greenhouse Cucumber (Cucumis Aativus L.) Hybrids

محل انتشار:

مجله پژوهش های اکوفیزیولوژی گیاهان زراعی, دوره 14, شماره 2 (سال: 1398)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Maryam Golabadi - *Associate Professor Plant Improvement and Seed Production Research Center, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran*

Mehrdad Kiani
Maryam Shirani
Atefeh . Nouri

خلاصه مقاله:

Comparison of Some Economic Traits in Greenhouse Cucumber (Cucumis Aativus L.) Hybrids Maryam Golabadi ۱.۲, Mehrdad Kiani ۲, Maryam Shirani ۲ and Atefeh Nouri.۲* ۱. Associate Professor Plant Improvement and Seed Production Research Center, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran Researcher Plant Improvement and Seed Production Research Center, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran *Corresponding Author: atefehnouri۶۳۰@gmail.com Received: ۲۰ April ۲۰۱۹ Accepted: ۲۰ June ۲۰۱۹ Abstract Cucumber is considered the forth-important greenhouse vegetable after tomato, cabbage and onion. Nineteen hybrids of cucumbers along with two check were test at the Islamic Azad University research greenhouse at Khorasgan branch (Isfahan) Iran. Genetic variability and selection of superior hybrid were evaluated using PCA analysis and bi-plot. The results of analysis of variance indicated a high significant difference among hybrids for most of traits. The highest significant correlation was observed for late fruit number with late fruit weight. There is non-significant correlation between fruit diameter and length in evaluated hybrids which could be due to parthenocarpy in these varieties of cucumber. The principal component analysis had grouped the estimated cucumber variables into four main components. The traits, which contributed more positively to PC۱ were mid and late fruit number and weight. In PC۲ highest positives were recorded for fruit number per node. Based on bi-plot analysis the hybrids ۴۰۲, ۲۰۲ and ۲۱۲ had a high mid and late fruit number and weight, and also a higher fruit diameter than other hybrids and the second group, had a high mid and late fruit number and weight, while the fruit diameter in these hybrids was low, thus the hybrids ۳۰۲, ۲۰۹, ۲۰۳, ۴۰۱, ۲۰۱, and ۲۰۸ had elongated and thinner fruits. The early and late fruit weight had the same trend in most hybrids and the difference among the hybrids was clear in the middle of the growing season. Therefore, the selection of hybrids with better performance is not related to their fruiting time, and this increases the accuracy of selection. In conclusion, PCA analysis can grouped hybrids and selected genotypes with suitable performance for future experiments.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا: