AGRONOMIC PERFORMANCES OF NEW SELECTIONS OF CAVENDISH VARIETIES (MUSA Spp. AAA) GROWN IN DIFFERENT PROTECTED CULTIVATION AREAS IN TURKEY

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GEOGRAPHICAL REGIONS OF TURKEY

- Eastern Anatolia
- Southeast Anatolia
- Central Anatolia
- Black Sea
- Aegean
- Marmara
- Mediterranean
Mediterranean
Alanya
Banana growing areas and total production figures have been continuously increasing the past 10 years.

Total banana growing areas reached 6,821 ha and production is nearly 370,000 tons.

Protected cultivation is very popular.
Why Protected Cultivation is Popular?

- Yield is higher
- From shooting to harvest is short
- Leaf area is higher
- Shooting occurs in the same year
- Frost and cold damage seen very rare
OPEN-FIELD

PROTECTED CULTIVATION

DWARF CAVENDISH
Background of the Study

- Ecological conditions
- Soil conditions
- Cultural practices
- Cultivation system
- Choose of cultivar effects yield and quality of banana
‘Dwarf Cavendish’ is the most common cultivar for open-field

‘Grande Nain’ and ‘Azman’ (local type) are the most widely planted cultivar/type for greenhouse conditions

But, it is still possible to increase yields and fruit quality and subsequently grower incomes in particular by testing new varieties
To evaluate the performances of four new Cavendish varieties (CV 902, Jobo, MA13 and Williams) previously selected by VITROPIC with local control (Grand Nain).
The experimental materials were introduced from Vitropic Company via CIRAD. All plant materials were propagated via meristem culture.
The study was carried out in Anamur and Bozyazı province in Mersin and Alanya province in Antalya.

Average mean yearly minimum/maximum temperatures are 15-30 and relative humidity 60-90% for each location.

The soil pH was 7.0-7.5, lime content was 3-5%, texture was loam, organic matter content was 3-5%.
CULTIVARS

- Grand Nain (Control)
- Williams
- MA13
- Jobo
- CV 902
Tunnel Type

7 m high at the top
5 m below gutter
Planting Density: 2000 plants/ha
Investigation Criteria

- Pseudostem circumference (cm)
- Pseudostem height (m)
- Total leaf number
- Bunch stalk circumference (cm)
- Hand Number
- Finger Circumference (cm)
- Finger Length (cm)
- Bunch Weight (kg)
RESULTS
General View of Anamur
General View of Bozyazi
General View of Alanya
GRAND NAIN
Cultivars Williams, MA 13 and CV 902 were more productive than the local control (Grand Nain) in protected cultivation. These results suggest that the new cultivars might have been advantage to higher earnings for growers in comparison to local plant material in protected cultivation.