

EFFECT OF CHANGING TREATMENT HEAT SYSTEMS AND PERIOD BEFORE VERNALIZATION ON THE GROWTH AND DEVELOPMENT OF THREE ONION CULTIVARS (*Allium cepa* L.)

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Onion seedlings are capable of producing reproductive organs after vernalization. Chilling period requirement, and period before vernalization in days (45, 60 and 75 days after germination) were studied on the 3 onion cultivars (Ghermez Azarshahr, Texas Early Grano and Pusa Red) in climatology laboratory of Physiology Department of Agriculture Academy of Moscow in 1995. The minimum and maximum period for flower stalk formation was on Pusa Red and Texas Early Grano, respectively. With the increase in plant age, period before vernalization, percentage of plant which produced flower stalk increased as well.

The maximum bulb diameter and dried weight occurred for plants which were kept at relatively high temperature (22-24°C day, 19-21°C night) in this temperature, maximum diameter bulb was observed in Ghermez Azarshahr and Texas Early Grano, however Texas Early Grano showed maximum wet bulb weight.

At relatively low temperature (15°C day, 7°C night), maximum and minimum bulb diameter and wet bulb weight was observed for plants, that transplanted to relatively cold temperature 75 and 45 days after germination respectively. However, Texas Early Grano was not affected by plant age.