Study and Comparison Different Types of Winter Spring and Semi-winter or Spring Wheat in the Normal and Laboratory Test Condition.

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ABSTRACT

For the comparison of different characteristics for wheat types in the normal and optimum laboratory test, study was carried out the Agricultural collage of the Areabili University in 2010 this study was conducted by randomized complete block design (RCBD) winter three replications, winter wheat types include, Sabalan and Sardary, spring wheat types Bayat and Moghan and between of these varieties were Bezostaya and Alborz. Winter wheat types for, length of radical length of first leaf and length of coleoptile was greater than of two another wheat types. Semi-winter or spring wheat was similar to spring wheat types. Total dry weight of shoot winter wheat types was highest. Sardary has lowest number of roots. From of 14 characteristics, 12 number of them for winter wheat types, 10 number of them for Semi-winter or spring wheat and 9 number of them for spring wheat two cultivar for per wheat types greater respectively. It can conclude that selection and study these characters were adapted for per wheat cultivar types and their response in the natural condition.

Key word: germination, normal condition, optimum condition, Semi-winter, spring wheat and winter wheat.

Introduction

During development, various aspects of crops, traits and characteristics in order to have the adjustment based on the characteristics of the species, under species, races and different types have been classified. One of these cases requiring further investigation are the types of autumn, spring and among (semi-semi spring autumn) in different wheat varieties is that they can identify the field of culture and further development of these figures be provided. Production and survival of plant adaptation to environmental factors depend on them. Wild plants under constant pressure by natural selection had been under pressure to fit the specific climatic conditions formed. The current crop of wild plants were essentially the result of human agricultural activities have changed. The type tests mentioned in optimal conditions to control and normal controls with 21% and 64% type of growth among the types of growth were autumn. The results showed that the highest grain yield of winter type and spring type cultivars and among the early autumn is to because the number of days to reach heading and grain yield, showed a negative correlation. Thus varieties with growth type, autumn and winter half of the earliness and tolerance to cold and drought have for planting in cold and temperate regions are recommended in the study of rural and colleagues [3] noted that the figures along with Sardari and Sabalan Coleoptiles, root length, shoot length and weight more than stipes, in their adaptation to dry conditions, cold and temperate regions is effective. Sadegh Zadeh et al study [2] long Coleoptile between different wheat

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types has shown a significant difference. Amiri study [4] indicated that the autumn cultivars like Sardari Vsblan compared Bzvstaya (among) cold do not tolerate very high. Wheat seed containing more Coleoptile ancestry during the wheat seed containing Coleoptile shorter faster bud [6]. The emergence rate of wheat seedlings with Coleoptile long, most are selected so that the wheat cultivars of different reaction temperatures on seedling emergence and speed during Coleoptile done [7]. Amiri and rural [4] based on 24 experimental cultivars, found that during Coleoptile Sardari cultivar had the highest and most root length among all the cultivars under study is.

Material and methods

This experiment in 2010 the Agricultural University researcher Ardebili with a choice of three types of wheat from any type of two cultivars, including cultivars Sardari and Sabalan for type autumn Bzvstaya mid autumn and Alborz semi spring for type among cultivars Bayat and Moghan one for the type of spring with culture Petri dish in a randomized complete block design with three replications was performed. Same uniform number 25 seed from each cultivar in petri dishes were sterilized and cultured to produce leaves of several experiments continued. One of the fungicides Benomyl in the thousands were used to avoid contamination. Different characteristics including germination percentage, germination, seedling root elongation the most, the number of roots, seed, length Coleoptile, first leaf length, cumulative length of roots produced, the average number of leaves, leaf length Howe, produced mean root length, weight fresh and dry shoots and roots for comparison and classification types were measured. Method of measuring the above traits were common standard method of collecting complete data, using analysis of variance and comparisons mean software MSTATC Duncan test was performed for six digits.

Results and discussion

The number of roots of all seed varieties was common in the group except Sardari cultivar because longitudinal growth of roots in Sardari cultivar is higher than the same number of roots of seedling growth and decreased significantly in roots had less seed. The average elongation of seedling roots of most groups, the first group Sabalan, other figures in the second group and third group a variety Moghan respectively were higher than each other. During the first leaf grown in number and Sabalan Sardari significantly more than other varieties and the rest were in the same group and had lower growth. Number of leaves in the three groups for number one in the first group Moghan, Bayat Alborz and the second group and the rest half in autumn and winter varieties in the third group were significantly higher than were together. The mean total length for three varieties of leaves, and Sabalan Sardari (winter type) and Bzvstaya (semi winter) more than other varieties and semi-spring type spring respectively.

Coleoptiles during the winter type varieties had the highest figure of the second group but Bzvstaya common varieties Bayat (spring type), respectively. Other varieties of spring type spring and half in the last group were the lowest that figure during a spring Moghan Coleoptile indicated. Dry weight of shoots, and winter types among a group significantly from the type of spring (Figures Bayat and Moghan 1) were higher. Dry weight of roots other than an Moghan, spring type spring of Alborz semi-Bayat and the first group, type the autumn and winter half of the second group were significantly.

Grouping of three types of wheat as a witness in a controlled and optimal conditions grew overall from the above sum is determined for the three adjectives mean root length, the length of the first leaf during growth and Coleoptiles, two types of winter Byshtraz among other types, such as type and spring type reaction have shown. The average length of all the traits of leaves, shoots dry weight, type, autumn and winter in the top half of the spring type and half were spring. So in this case and possibly a series of other characters, among the types and characteristics depending on their reaction to the two types can other half divided into autumn and spring half and get more attention that despite having shared the main characteristics (Like the growth in autumn and spring) of some of the other characters are distinct and specific conditions can be planted. Traits of leaves and root dry weight and semi-spring type spring in the initial stage of seedling growth the top half of the autumn and winter types were. Because the growth of the habit, spring type spring and half in optimal conditions of temperature and sufficient water and so their growth (especially early) is done much faster and winter type growth habit and part of autumn and winter periods of sleep and the recession, without the need of the early cold slowly grow, the result for the 14 traits studied in eight traits among cultivars in autumn cultivars with similar groups and figures, but were common only in the spring with four traits studied Trait and similar figures were common in the semi-digit numbers among Trait Bzvstaya separately for 10 traits with six figures in the autumn and spring varieties with traits were common in the group. So figure on the number of semi-Trait Bzvstaya many traits similar reaction Trait figures showed. If the 10 varieties of Alborz semi-spring type attribute with the same group or a common spring and autumn in the six figures in the trait was common. As a result, total general type among many traits with the same type
and share in autumn than spring type reaction have shown if you type among the figures to be considered separately, part numbers in autumn and autumn cultivars with traits half of the spring varieties with spring varieties with common characteristics are high. Figures necessary and part of spring and autumn half among the types of reactions have shared together and with other types of more attention and study to be cultivated and developed areas, especially because they have two in autumn and spring planting further be provided. If reforms to crop breeding and possibly on the type compatibility among the many different directions can be created in these figures. For example, type Bzvstaya among a series of specific traits such as resistance to cold of the winter type is better. The mean length in autumn cultivars traits leaves, dry weight of shoots and roots, during Cololptyl, most root elongation during the first seed and the leaf spring Brtrnd significant figures. Spring cultivars for the traits of characters and sub-branches that root and leaf number were superior.

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