**Agronomic qualities of new soft fall – seeded wheat cultivars of different ecological and geographical origin in terms of Kirovohrad cultivar station**

**The objective** of the research was to choose cultivars, that are best suitable for agroecological conditions of the micro zone, where the research was conducted.

The following **methods** were used in the research: field, statistical and analytical.

**Results.** It was found out that new cultivars of unequal ecological and geographical origin are diverse environmental biotypes, that differently response to the change of ambient conditions. Yielding capacity as the main composite index of adaptation of genotypes to the growth environment, varied depending on the genesis of the cultivar. The highest yield capacity was demonstrated by cultivars of the following producers: W – Dieckmann GmbH, Deutsche Saatveredelung AG, Linz and Saatbau LLC, OOO Sady Ukrainy. The average yield capacity of cultivars of these producers accounts for 8.02, 7.69, 7.37 and 6,98 ton/ha respectively. The cultivar SN Combin is well adapted to the conditions of the micro zone. The yield capacity of this cultivar within the period of 3 years accounts for 8,17 ton/ha, exceeding the standard yield capacity of the cultivar Podolyanka, which is estimated as 1.35 ton/ha. The cultivar is photoperiodically insensitive, and it grows well in conditions of short day in late autumn and early spring. The cultivar Estivus also has a high yield capacity. Its average yield capacity accounts for 8.02 ton/ha. However, this cultivar has low freezing tolerance, so it is unappropriate to grow Estivus in agroecological conditions of the cultivar station. High yield capacity is also typical for the next cultivars: Mudrist odeska, Traditsiya odeska, Fabius, Staleva ta Lil. It was also found that cultivars Karmelyuk, Poltavchanka, Magistral and Garantiya odeska have lower adaptability to soil and climate conditions of the micro zone and reduced yield capacity in comparison with a standard (21.7, 18.8, 19.8 and 14.2 % respectively). The early crop cultivars are Magistral, Poltavchanka, Montrey and Boditsek, and the middle and middle – late crop cultivars are Estivus, Fabius, Zolotonoshka, Vodogray bilotserkivskiy, Traditsiya odeska. Plant high varied differently. Most of the cultivars are short – stalked or semidwarf. Height varied from 79-83 centimeters (Patras, Estivus, Bankir, Nasnaga) to 101-107 centimeters (Malanka, Pokrova, Orlean, Askaniyska). In favorable conditions the latters are prone to lodging. A significant difference of freezing tolerance was found out. The highest freezing tolerance have the following cultivars: Malanka, Poltavka, Vigen, Obryad, Poltavchanka, Karmalyuk and Lil. A critical freezing temperature for them accounts for -17,5 ̊ C, and their capacity for wintering was estimated at the level of 90%. Approximately the same indices have such cultivars as Magistral, Zolotonoshka, Pokrova, Mudrist odeska, Nasnaga, Vodogray bilotserkivskiy, Orlean, Montrey and Askaniyska. The average freezing tolerance have cultivars SN Kombin, Patras, Traditsiya odeska, Bankir and Moskal. Lower below average and low freezing tolerance have the next cultivars: Estivus, Boditsek, Famulus and Fabius. It is unappropriate to grow the latters cultivars in conditions of the cultivar station.

**Novelty.** The research gives us an opportunity to find out a substantial difference in agronomic qualities of newly registered soft fall – seeded wheat cultivars depending on their different ecological and geographical originand also to identify and select highly adaptive genotypes.

**Summary.** Taking into accountthe agronomic qualities andadaptability of the cultivars to the micro zone of the cultivar station it is advisable to grow SN Kombin, Pokrova, Mudrist odeska, Veteran, Staleva and Lil.

**Key words:** cultivar, fall-seeded wheat, ecological and geographical origin, yield capacity.

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