

FUNCTIONAL-AND-TECHNOLOGICAL AND STRUCTURAL-MECHANICAL PROPERTIES OF THE MEAT OF BULLS KALMYK BREED IN CONNECTION WITH THE PRESENCE OF GENE POLYMORPHISM CAPN1

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The analysis of the relationship availability of genetic polymorphism CAPN1 with the change of indicators of structural-mechanical properties of meat. The study was conducted with the use of device Warner Bratzler modification of Maksakov. Account of the different degree of manifestation of mutation alleles from absence to complete domination of the desired allele (CC). Analysis of functional-technological data shows that the presence of the desired by the SS genotype of animals accompanied by a decline in the value of resistance cutting, in comparison with animals without mutations and have heterozygous its manifestation. When ripe meat (up to 18 days) revealed no difference between animals with genotypes GC and the SS, the difference with the group with GG genotype was minimal. Disperse analysis unifactor complex installed power of influence of the genotype on physical-mechanical parameters tenderness of the meat. Disperse analysis unifactor complex installed power of influence of the genotype on physical-mechanical parameters tenderness of the meat. Statistically significant effect of genotype on physical-mechanical parameters tenderness of meat maturation. Analysis of water-holding capacity shows that a high water-holding ability to have meat products, which were obtained at slaughter experimental cattle all genotypes. But the increase of maturing up to 18 days, established inter-group differences in water-holding capacity. So, the animals II and III groups had an advantage over the I group with less fat content in the muscle tissue.

ВЛИЯНИЕ ВЫСОКОДИСПЕРСНЫХ ШЛАМОВЫХ ОТХОДОВ МЕТАЛЛУРГИИ НА РОСТ И РАЗВИТИЕ LYCOPERSICON ESCULENTUM MILL.

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Изучено влияние высокодисперсных шламовых отходов металлургии в виде водных суспензий шлама исходного на рост и развитие томата культурного (*Lycopersicon esculentum* Mill.). На начальных стадиях онтогенеза при внесении в планшеты с почвой суспензий с концентрацией шлама 1 и 10% концентрациях тормозится рост как надземной части, так и корневой системы томата. Обработка корневой системы 40-дневной рассады томата шлагом исходным (концентрация 1, 10, 20%) в течение 3-х дней также отрицательно влияет на развитие вегетативных и генеративных органов. При проращивании семян в планшетах с почвой учитывались следующие параметры: высота проростков, длина корня, масса надземная, масса корня. При выращивании рассады учитывались следующие морфометрические параметры: высота проростков, количество листьев, диаметр стебля, цветочные кисти, количество бутонов.

INFLUENCE OF HIGH DISPERCED METALLURGIC WASTE SLIMES ON GROWTH AND DEVELOPMENT OF LYCOPERSICON ESCULENTUM MILL.

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An influence of high dispersed metallurgic waste slimes in form of water suspension of original slime on growth and development of cultivated tomato (*Lycopersicon esculentum* Mill.) have been investigated. During initial stages of ontogenesis (after treating of experimental planetables by suspensions with concentrations 1 and 10%) the growth of above ground and underground parts (roots) of tomato is impeded. The treating of root system of 40-days seedlings of tomato plants by original slime (concentrations 1, 10 and 20%) during 3 days also had negative influence on development of vegetative and generative organs. Seed germination in the plates with the soil into account the following parameters: the height of seedlings, root length, mass aerial, root mass. When growing seedlings into account the following morphometric parameters: Seedling height, number of leaves, stem diameter, flower brushes, the number of buds.

СОДЕРЖАНИЕ ТЯЖЕЛЫХ МЕТАЛЛОВ В ПАХОТНЫХ ПОЧВАХ УЛЬЯНОВСКОЙ ОБЛАСТИ

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Проведен анализ содержания тяжелых металлов в пахотных почвах административных районов Ульяновской области за период с 1995 по 2011 г. Изучалось средневзвешенное содержание свинца, кадмия, цинка, меди,