

Fahr. in the shade and in January it gets down to -31° Fahr. The average rainfall for 33 years is 282 mm.

Mr. Bogdan's opinion of this *M. falcata* is that it will become an important forage plant in all such sections of Russia where the summers are hot and dry and the winters cold and with little or no snow.

A second specialty of Mr. Bogdan is the selection of *Agropyron cristatum* and in this he has been almost more successful even than with *M. falcata*. He has about 15 distinct strains, some tall, some low, some fit for very dry places, others for moister places and he is still getting better types. This grass has been proved such a success in south Russia that the farmers prefer it to the ordinary alfalfa, for it is far more drouth resistant, does not freeze out and gives an early crop of fine hay. The sub-species, *A. desertorum*, can be mown in early June. The commercial part of the growing has been turned over to the local Zemstvo Agricultural Society, which has 70 desiatines in this grass and they have an order on hand for 1,000 pood from the Kharkoff Agricultural Society. It sells at Krassny Koot for 8 Roubles per pood and Mr. Bogdan stated that we could obtain perhaps 20 poods yet of this year's seed. This seed is of course composed of all strains and perhaps some few other grasses in between, but it is all right for general purposes.

Besides these two main crops Mr. Bogdan works with *Agropyron repens* and *A. ramosum*. Of the first he had selected some types that give a wonderfully good stand on low places, which are inundated in the spring, and of the latter he has some very strong growing forms, fit for stony lands. Mr. Bogdan is very enthusiastic about *A. repens*, which he says exists in as many sub-races as *A. cristatum* does. Then he also keeps his eyes open for promising wild plants and has a number of various things under observation which however I could not see, as everything was cleaned off by winds and frost. He also thinks that among the many species of *Astragalus* there are some fit to be grown as forage plants. He invited me to come back toward the end of June, as everything is at its best then in the south Volga regions.

Mr. Bogdan also found the genuine *Medicago media* Litv. which is quite distinct from *M. media* of cultivation; it occurs in the southern part of the Astrakhan Territory near the salty lakes of Kamish-Samarski in Turgaisky and Uralsky counties. He donated me a herbarium specimen, but the few seeds he collected had been sown already; later on perhaps he could send us some. The plant is of slender growth and has by no means the promise of a successful forage plant, like *M. falcata*, *M. coerulea* and *M. glutinosa* have.