

Immigrants from Russia

"I am mad because the known varieties of fruits are not hardy and I don't know what to recommend." Thus wrote the venerable horticulturist and first director of the Iowa Agricultural Experiment Station, Captain R. P. Speer.

It was a perplexing problem to find hardy varieties of fruits for the Iowa planter. Settlers from the East brought with them grafts and seeds of the varieties grown at their homes. The foundation stock of these varieties came mainly from England and France, countries having comparatively mild winters and a humid atmosphere. They were, therefore, illy adapted to the low winter temperature and the hot dry winds of the Iowa prairies.

In the first annual report of the Iowa Experiment Station made in 1888, Director Speer stated, "although there is nothing to encourage farmers who intend to follow old methods of tilling the soil, yet they have less to complain about than the horticulturists as the winters of 1884 and '86 furnished proof that there is not a single American variety of apple, pear or cherry which is adapted to Iowa." Such was the situation when Professor J. L. Budd assumed the position of Horticulturist at the Iowa Agricultural Experiment Station in the early eighties.

In casting about for a solution for this problem Professor Budd decided that the answer lay in the introduction of varieties from regions of the Old World having soil and climatic conditions similar to ours. Such varieties would be likely to withstand the hardships of Iowa climate. He therefore turned to the rigorous regions of northern Europe, particularly Russia and northern China. Upon securing a leave from the college he spent months making a horticultural survey of these regions.

On this trip every possible means of conveyance, including "shanks hoss", was employed. He traversed inland Russia, a prairie country some two thousand miles across, where the summers are hotter and drier than they ever are in Iowa while winter temperatures often fall as low as forty and fifty degrees below zero. Along the Volga he found pear trees used as street trees. Numerous families of apples, hardy to the terminal bud and with thick leathery leaves adapted to the scorching winds of summer, were encountered. He also discovered many varieties of cherries of enticing color and firm of flesh. Even peaches were found in northwestern China and Bokara. From Siberia he secured many attractive varieties of trees and shrubs including lilacs of many shades, while the Russian olive and the dwarf maple he brought from the land of the Tartars. The Japanese rose and various honeysuckles were also included in his list of horticultural immigrants.

Budd returned from this strenuous journey, tired and worn in body, but happy and buoyant in spirit. His importations included over one hundred varieties of apples, many of which he announced were as hardy as the Duchess and bore a fruit that stored well. Some twenty-five varieties of pears and thirty-six kinds of cherries were also imported.

The next task was the multiplication and dissemination of these varieties for trial. Here began a most interesting, and at that time, the most extensive experiment of its kind in America. Professor Budd planned to sell the trees at a nominal price for testing, and through the coöperation of the growers, determine their value for this State. Before resuming his college activities he operated a nursery and was an unusually successful propagator. In a short time thousands of his Russian fruits were planted throughout the upper Mississippi Valley.

Unlike many seed crops there is an interval of six or seven years between planting time and the first harvest. Thousands of enthusiastic amateurs cared for these buds of promise, feeling that their troubles were over, but, alas, they had only begun. On the Iowa prairies, where the soil has a high nitrogen content coupled with ample rainfall and abundant sunshine, these horticultural immigrants flourished beyond measure. Like starved city waifs turned loose in the country, they grew with a joy unbounded, but not for long. The bees in going from

flower to flower carried the twig blight. This disease found an ideal lodgment in the soft sappy twigs. In some instances the disease wrought havoc in a single day blackening the leaves and twigs as if scorched by fire.

Neither were these soft spongy-celled twigs prepared to withstand the rigors of winter. Thus through blight and winter killing the list of "iron clad" varieties, as Professor Budd termed them, were rapidly decimated. Furthermore, instead of these Russian immigrants supplying winter fruit, most of them ripened very rapidly in the warm autumn of central Iowa. They simply added to an already over-burdened list of summer and fall varieties, and hardy winter varieties were still lacking.

In the State Horticultural Society in which Budd served energetically as secretary, the merits of the Russians became an issue. Dissension arose which resulted in his temporary retirement from that office.

The Russian list of ornamental trees and shrubs fared better and many of them proved hardy and attractive. The Russian olive is widely planted and is much esteemed for its silvery foliage and musky fragrant flowers.

In the regions farther north Professor Budd's fruits made a better score. In the Dakotas, Minnesota, and across the Canadian border many of his varieties of apples succeeded where all others failed. Indeed, had this experiment been planned two hun-

dred and fifty miles farther north it would have probably met with a much greater degree of success.

At the close of half a century since his experiment was inaugurated, a few varieties such as the Charlamoff and Hibernial have been able to maintain a place in the list of commercial varieties for northern Iowa and farther north. On the other hand, for central and southern Iowa, generally speaking, the Russian apples have failed, though, like a fond parent, Professor Budd could never see it that way.

Indirectly, however, his importations have made an important contribution to the horticulture of both this State and the entire upper Mississippi Valley. As a hardy foundation for apple breeding stock they have served as a parent in innumerable crosses. Professor H. L. Lantz in charge of the apple breeding work at Ames states that the Russian apples have proved to be a valuable parentage for improved kinds of apples. Some of these varieties such as the Hibernial are also valuable as a stock upon which to graft more valuable but less hardy sorts. In a word, while these horticultural immigrants have not played the leading rôle that their friends expected, they have contributed indirectly offspring which give promise of becoming useful citizens of the horticultural world and the future will hear more of them.

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