MORE OF CANAIGRE.

It Will Flourish in Utah From Cache Valley to St. George.

LIGHT SANDY SOILS ARE THE BEST.

Plant the Roots in August and Gather the Crop the Next Summer.—Irrigation Unnecessary.

RAMAH, New Mexico,
March 1, 1894.

Editor Deseret News:

Numerous communications from Utah have reached Ramah in regard to the cultivation of the canaigre root and some of the inquiries show a misunderstanding of a statement made in the article on the subject from Ramah published in the EVENING NEWS of Feb. 10th, which followed to prevent loss to failure in a continuable by U. S. farmers and thus discourage the introduction of the plant into the Territory. I desire to correct this and to add some other information on the subject as the experience of the climate of Ramah with the wild root enables them to furnish to their Utah friends.

It was stated in the article above referred to that the season of the plant's growth was from October to May. Also that the winters at Ramah reached from ten to fifteen degrees below zero, and the inference has been drawn that the plant grows during the winter when the earth is frozen hard and covered with snow. Perhaps it would have been more intelligible had the fact been stated that the root does not grow when the ground is frozen, instead of seeing it frequently that in a climate where the thermometer registers as low this palpable fact should be understood.

The statement, however, that the plant grows from October to May was taken from the Arizona Experiment Station bulletin and seems to be false to the warm climate of southern Arizona. At Ramah, a climate nearly five feet of Cache valley, owing to an elevation of 7,000 feet, it begins growth with the rainy season, which is from the 20th of July to the 1st of August. It flourishes until severe cold weather, which begins generally from the 1st to the 15th of November and lasts until about the 1st of March, when the plant again survives and matures from the 15th of June to the 1st of July, thus showing that the period of growth is similar to that of winter wheat, as to which all farmers are familiar.

We would therefore say in reply to all those who have inquired for the root for seed with which to experiment thinking that the time to plant in Utah will continue to have in the season, and would suggest about the middle of August. It will, however, grow if planted in the spring, though according to a recent publication in the Irrigation Age, it will not mature as ripe as fall or late down on the approach of hot weather and revive again at its natural season, developing to maturity no faster or sooner than if planted at the latter period, and hence, if the statement be correct, spring planting would be of no advantage.

The canaigre root has been referred to in various leading articles published in Utah and Arizona as a "tuber" which means a plant that will grow from the eyes like the potato, in contradiction of which we erroneously called it a "tuber" in the former article referred to. These publications will surely mislead farmers if not corrected. It is a root, not a "tuber," and must be grown from the root or seed. It is probable that it may be split between the eyes that appear on the crown and multiplied into three or four for planting but this we do not know and would advise the planting of the entire root, to be certain of results.

The planting of the seed does not seem to be practical. Although the plant flowers profusely, few of the seeds are said to mature, while it is believed that few of those which do mature will germinate when planted. The Arizona Experiment Station bulletin seems that diligent search failed to discover a single seedling growing in the fields of wild canaigre. The planting of the seed, if obtainable, would require two years to produce a crop for the market, the first year's growth resulting in but a single root, which, either replanted or left in the ground, will produce its mother of roots the second year. Hence planting the roots from the cutter is the quickest to secure a crop for the market. Besides, the soil may be readily supplied for planting while the seed cannot; at least this is the case at Ramah.

While the plant seems to serve a general accommodation for various soils, canaigre is an exception to the rule that there is everywhere in nature a special adaptation of soil to plant. It will grow in the vicinity of Ramah in light, rich soil, or in sandy or sandy loam soils, requiring a loose open earth while heavy red and clay loam soils do not have. But the Arizona Experiment Station bulletin informs us that it may be cultivated successfully in heavy soils by watering and properly loosening up the earth.

From observations made here we would say, do not plant in mineral soils and will suggest from the limited knowledge we have of the soil of Utah such places as the Provo bottom and the light sandy lands in the vicinity of Santaquin, Utah county, the Sanpitch in Sevier county, and Lemon wood near Lawson in Cache county.

As to irrigation, of which a number of inquiries have been made, we will say, that while in southern Arizona, where the great heat rapidly dries out the ground, the plant needs watering several times in a season, at Ramah it is not the case and we think irrigation would not be required in Utah. The late snowfall here at the time the plant begins its fall growth and the melting snows at the time of its revival in the spring is all the water the wild root gets in this country. And where it would get there in Utah irrigation would not seem to be necessary. Though it may be late winter wheat which is successfully grown without irrigation, yet is better when watered.

What we know of the plant here is as to its wild state only, hence we can give no definite information in regard to planting or cultivating, but we quote what has been published in a bulletin of the Arizona Experiment Station on the subject. "The wild growing, so far as observed, is confined to the lower sandy and at the end of our long and comparatively mild winter, and moderately heavy soil at Phoenix is larger than on rocky land with, we planted about the same time and irrigated. It appears necessary, in order to plant both the surface and roots of the wild root, to cut the roots into two or three pieces and plant each in a separate hill. Cutting the roots in two, allowing one half of the crown to remain with each piece, is the strongest way of doing it. Other positions and more plants grown from below the root crown will not do so well. In view of the uncertainty of the wild root, it is not advisable to depend on it for a supply of the root for commercial purposes. The cultivated plant, however, is a very hardy plant, and is well adapted to cultivation. It is a perennial, and will last for years if not injured by the digger. It is a native of the Mexican plateau, and is well adapted to arid regions. It is a native of the Mexican plateau, and is well adapted to arid regions. It is a native of the Mexican plateau, and is well adapted to arid regions