

these changes--in fact essential to the results. The same plant grown both in high and low altitudes will be found to yield more sugar and less acid in low altitudes and more acid and less sugar in high altitudes.

In canaigre, high yields of tannic acid are essential to permanent success. Therefore it may safely be inferred that this crop grown near the sea coast will in the course of a few years change its character entirely and become unfit for the purpose originally intended, and that such regions can never compete with such countries as Utah for the uniform high quality of its product.

It is quite common to note in articles written about canaigre the words: "Barks are getting scarce and canaigre will be needed to take their place." While this is true, the writer can safely say that canaigre is more than a substitute for any of the barks. It makes an entirely different quality of leather. Upper leather made with canaigre is softer and more pliable and stronger than that made with bark. Sole leather made with this root appears to be soft but it becomes hard and glassy when worn for a few days.

A crop of canaigre will not figure on paper like crops of oranges, lemons, strawberries, etc., and then prove a flat failure for want of a profitable market at the critical moment of maturity. This crop figures more like a four per cent United States bond; principal and interest always available, with no chance for loss of either.

It differs from all other crops in being the only one where you get your seed back with the increase of growth. The seed root does not decay, but frequently increases in size and weight, if the crop does not receive water during its period of rest, say from June to September. Canaigre needs very little water. Frosts, heat, floods, drouth, insects, and disease have no terrors for this crop. It may be left in the ground safely for five or six years, and will constantly increase in weight without cost for storage or insurance. It need not be dug until a market has been secured, and in this respect is unlike any other crop which must be harvested when ripe, and then has to meet an unprofitable market or be stored under expense. If a market is at hand the crop need not remain in the ground more than two years.

Yours very truly,

J. W. BROWN,  
General manager El Paso Tanning Co.

### STAR VALLEY STAKE CONFERENCE.

The twelfth quarterly conference of the Star Valley Stake of Zion convened in the Afton meeting house, August 17th and 18th, 1895.

After the usual opening exercises the Bishops of the various wards gave in their reports, which showed that the Saints were improving spiritually as well as temporally. As a general rule the health of the people in the two valleys is remarkably good.

The speakers all through the conference spoke on topics of immediate interest to the Saints, and exhorting them to a more diligent exercise of their everyday duties, felt to impress

upon their minds the necessity of observing the Word of Wisdom, the paying of their tithes and offerings, so that the poor could be cared for and all rejoice together in the worship of God.

Harvesting is being carried on as rapidly as possible, but owing to the severe frosts this summer the crops are not as good as we would liked them to have been; the potato crop is nearly a failure this season.

Some of the Saints were disappointed in not seeing some of the First Presidency of the Church on the stand, but it was understood that circumstances hindered them from visiting us. We had a good time listening to the Words of God through the speakers and all felt to rejoice in the work which we are engaged in.

The weather is beautiful and every one is busy in the hay fields or on the farm laying up stores for the coming winter.

WM. H. KENNINGTON,  
Stake Clerk.

### KEEP UP THE SPRAYING.

We notice in traveling around through this county the past two weeks that while there are a few that are still spraying and the chances are good for their saving a large proportion of their fruit, unfortunately the greater portion of the people have stopped spraying at from two to six weeks, and the codling moth is now playing havoc with the fruit. We find that there is still much fruit that is not yet destroyed by this pest, and about two more sprayings would save a large proportion of it.

It is very easy to tell when to commence and when to stop spraying for this codling moth pest if we will only watch the temperature a little and also watch for the first wormy apples. Then we can easily tell when to commence spraying, for the moth will not hatch out in the spring till the temperature gets up to about 60 degrees; and the few that may hatch out in warm, sheltered localities will not lay their eggs unless the temperature averages about 60 degrees in the open air. Thus we see that although the trees came into bloom this year much earlier than last, some of them coming into bloom about the middle of April, there were no wormy apples to speak of till after the 1st of July. Yet many of our fruit growers had been spraying for about ten weeks prior to July. It is very seldom that the moth commences laying its eggs earlier than about the 10th of June; and owing to the low temperature or cool nights in June this year, as I before stated, they laid but very few eggs before July. In fact there was not one fruit grower in twenty that found a wormy apple before that time. The worst feature is that many stopped spraying soon after that time, and now it is the same this year as last. The moth is having everything its own way, and just so long as the hot dry weather lasts the moth will continue to hatch and lay eggs.

Now if this be true and it is a demonstrated fact, why can we not spray and protect our fruit at the time the moth works on it? Of course last year the whole business was more or less an experiment, but this year we certainly

ought to do better work. If we are going to succeed in this matter the work will have to be done thoroughly and at the proper time. Spraying just enough to comply with the law, or because we think we have to, and sometimes the work is only about half done and often with inferior material, certainly will not bring success. Ordering the people to do a lot of unnecessary work at spraying will not accomplish the desired result.

I have a proclamation of one of our probate judges, ordering no less than ten six sprayings before the moth commenced to work on the fruit. We all know that the people do not like to be forced in this matter, and it is hardly to be expected that they will be willing to spray all spring and also through the summer. Thus care should be taken to have the spraying done at a time when it will accomplish the best results.

Many people do not favor the law, and unless it is operated more effectively and at less expense they may rebel against it. One thing is certain; something should be done if possible to try and create more interest and a better feeling in regard to the matter among the people, and unless this is done success will not be assured.

In regard to the moth laying their eggs in the blossom: This year it has been proven to the satisfaction of nearly everybody that no codling moth eggs are laid in the blossoms. Those who have investigated the subject know that whenever the moths do lay eggs these hatch out within a week, and the presence of the moth can easily be discovered, as it eats its way into the fruit. The fact that no codling moth larvae was found of any consequence prior to July, eight to ten weeks after the trees were in bloom, is proof positive that no eggs were laid in the blossom; and, as I before stated, the reason is that the temperature is too low for the moth to hatch out or lay the eggs when the trees are in blossom. Now, if this is true, and experience proves that it is, then is it not sheer nonsense to waste our material and time, as many of us have done both this year and last, in doing the spraying too early and before the moth commences its destructive work?

If we will take the trouble to inquire we will find that the best success in spraying last year was the late spraying done at the time the moths were working on the fruit. It is now plain to be seen the same is true this year. Hence it is evident that the moths which are now working on the fruit will not stop as long as this warm dry weather lasts, therefore the best thing to be done is to keep up the spraying during that time. Next year we should try and do better and more effective work at the time when it will do the most good. E. S. LOVESY.

A dispatch from Echo Mountain Observatory, Cal., says that on Wednesday at 2 o'clock, Lewis Swift, the astronomer, discovered a new comet in the constellation Pegasus. Its place was in right ascension no hours, 27 minutes, 40 seconds; declination 5 degrees, 30 minutes. It is very faint and has no tail. It is moving slowly northeast, parallel with the Ecliptic Periodic. Nothing is known as to what comet it is or whether it has been seen before.