

A HOP TALK.

As a recent settler in Washington hunting for hop information, I called on C. M. Davis, for many years superintendent for Ezra Meeker, the well-known hop man, for a practical talk and this is about the way it ran:

I desire to plant ten acres to hops this coming spring. What is the first thing to be done?

Well, said he, if the land is ready for the plow the first thing to do as soon as spring opens is to plow it deeply—running seven or eight inches, if the land will stand it, or which is better, in my opinion, plow five or six inches and follow with a subsoiler, loosening the soil several inches lower, but not throwing it to the top. The surface soil is best fitted for the crop.

The plowing done, what is the next step?

Simply get the soil in fine tilth and then set the poles.

What would be your manner of laying off the ground and putting in the poles?

Procure a flexible steel wire—say No. 12 hay wire—as long as can be straightened readily; some say 500 feet can be used. As I would, have my hills 7 feet apart each way, I daub a bit of bright paint upon the wire every seven feet its entire length. Start at the southeast corner of the field and have an assistant stretch the wire to the southwest. Have small pegs driven at every paint dot on the wire, always placing the pegs inside the wire. These pegs should be about ten inches long and $\frac{1}{4}$ to $\frac{1}{2}$ inch square. Set deep so that they can be moved readily. Now throw the wire along the west side from the corner you have reached and set the pegs as before; then throw the wire along the northeast boundary, pegging every seven feet, always placing the pegs inside the wire. Now go back to the western boundary and stretch the wire north and south seven feet in from the first row of pegs, setting pegs again as before. Move in another seven feet and peg, and so on until the eastern limit of the field has been reached. You now have your field in rows exactly seven feet apart each way. If the field is too long for one stretch of the wire, duplicate the measurements.

You can use either the crown roots or runners. For myself I prefer the runners for the reason that they will not need grubbing and pruning the first season. With crown roots that must be done. I go for saving labor. Cut the runners to two rings of eyes—they will be about four inches long. With a common hoe remove the earth about three inches from each peg and always on the same side of the pegs of each row, for the roots. Set the roots on end, inclining a little toward the pegs; cover them lightly.

When would you plant these roots?

As soon as the ground is made ready for them. March or April where I have cultivated the crop.

When would you begin setting the poles?

Just as soon as these roots are planted. Set a pole to each hill and remove the pegs and place the poles exactly where the pegs stood. It is preferable to have the roots on the side of pole next to the prevailing winds. Procure at a hardware store a dibble made for the purpose. I like the square ones best. Make a hole with this dibble and insert the pole firmly but do not tramp the earth about it; for the hop roots must have free play.

What about short poles?

I have had no experience with them, but I am inclined to think they will be the thing for the Yakima country. I would have them eight feet above the surface of the ground. I think if inserted 18 inches in ground that they will stand firmly. Of course the short poles are the cheaper, and they will save labor, but I do not know how they will affect the yield, having had no experience. By the way, when speaking of the roots I should have said plant three or four male vine roots to the acre placing them on the side of the prevailing winds.

How soon should the training of the vines to the poles be begun?

As soon as the young shoots are 12 to 24 inches long. Select the two most promising and tie to the pole.

What material do you recommend for strings?

Cut hop sacking, gunny sacks, or kiln carpet in squares of about 16 inches, and unravel the strings. Tie loosely so as not to bind the vines. Do not break the tops off of the vines you train. Handle with great care. Children can do this work admirably. In fact prefer them. Have them twist the vines about the poles "with the sun." Two to three tyings will be needed. The vines must be kept to the poles. Leave the other sprouts that have germinated until you see that the chosen two are getting on all right, then pinch them off close to the ground.

When should cultivation begin?

As soon as weeds or grass appear, and keep at it as long as vines will permit; use a double shovel plow throwing the dirt from the roots. Run the plow deeply but not near enough to cut the growing roots. The second time throw dirt toward the roots and keep doing this. Lay by with a two-horse plow.

THE ALKALI QUESTION.

By Prof. Eugene W. Hilgard.

I have examined elaborately a sample of soil taken almost on the spot where North Yakima now stands, as typical of the soil of the Ahtanum prairie; also of the Yakima prairie on the reservation, at two points. Also of the Yakima bottom, Columbia bottom at several points in the northern part of the Great Bend country, and in the Spokane and Colville regions.

The average for soil composition in Eastern Washington is ahead of that for California on nearly every point—of course our glorious climate amply makes up for

that—and is excelled only by the Montana average. Your "prairie" soils are about on a level with those of our great valley, being of course lake deposits like these, subjected afterwards to arid conditions. They only need irrigation to equal those of our great valley, and some do not even need that. Curiously enough, a slight taint of alkali renders crops perfectly safe in the Bend country, because of the soil moisture it preserves. Where the alkali is lacking (as at Ritzville) there is much more stress on the crops in summer.

Of course, too much alkali is rather hard on some of your hands, and for these the remedy is just the same as with us; by underdraining, or ditching and flooding. More than half of the alkali land that people are afraid to touch requires no other remedy than thorough, deep tillage, maintained at all times. Gypsum (land plaster) and summer tillage to keep the soil loose, usually suffices to rid the land of "black alkali."

At Old Yakima they have actually scraped alkali into the river in olden times, there was much of it. And it was very "black"—I suppose it still is. Near the mouth of the Yakima it lies half an inch thick on top in summer. In short, the alkali question is upon you as it is upon us, and will be more as the irrigated districts become older. I would like to know to what extent, if any, that effect has yet been produced on the Ahtanum or Yakima prairies. Of course in the Bend country some of the valleys are as bad in that respect as any in the United States.

I give you these general ideas for the present. In the absence of my records I cannot well give you a detailed article, will do so by and by; but would like to know how things are going in the Yakima region and what are the points most desirable to dwell on at the present time.

University of California.

BY WAY OF INTRODUCTION.

E. H. LIBBY—My Dear Sir. You have been known as a journalist so long, it seems to me that your name is a sufficient introduction, certainly with agricultural men.

* * * Wishing you abundant success, I am sincerely yours,

[PROF.] EUGENE W. HILGARD,
University of California.

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EDITOR THE RANCH: Your letter was a great surprise to me. I most cordially return your compliments of the season, and sincerely hope you may find your health, as I have no doubt you will in our admirable clime. This is a glorious section, this great northwest, and there is much work to do in the line you propose. I hope to be in Spokane next month and to see you there. I have no doubt you will find most cordial support in your work by the Yakima people—they are such enthusiasts and rustlers. All success to THE RANCH.

[PROF.] E. R. LAKE,
State Agricultural College, Pullman.