

Environmental Adaptability of Avocado Varieties

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I have been thinking along the line of districts, and have divided Southern California into six districts as I see varieties in their performance in these districts.

There is the north coastal and the south coastal, and in thinking of what is commonly called the transitional section, I have divided it up into the near coastal transitional—that section of Los Angeles County which lies southwest of the foothills and includes Rivera, where quite a number of plantings have been made during the last few seasons, and also includes the area around La Habra Heights. The intermediate transitional takes in that section lying in the San Diego Valley and along the foothills, where there are considerable plantings. Then there is the inland San Diego section, which I believe is different from the intermediate or near coastal transitional, and includes Fallbrook, Escondido, and in between, the Vista area. Then we have the interior section, where many people who have studied avocados say that they can not be grown very successfully.

I realize that in the north coastal area one of the first considerations is the Fuerte, and that has been found not very successful in that area as a whole. However, there are certain men who have orchards containing strains of the Fuerte—certain trees and whole groups of trees where they have gotten good production from their particular strain of Fuerte. I look forward to the possibility of developing a strain which will perform in that particular district.

It is well known that the Edranol has been tried out there, especially on the Bishop Ranch, along with the MacArthur and the Leucadia. Perhaps the MacArthur and Leucadia are not equal in any respect, but it looks as though the Edranol is a fruit which can be grown successfully along the coastal area.

The seedlings I will mention in these districts are mentioned because of the fact that they have been given a little publicity, although there are probably just as many other seedlings that are Fuerte-like in appearance, that may be as good as those mentioned.

In the south coastal area it appears that the Fuerte is out. We may find that there may be some strains which have developed under coastal conditions which may grow successfully and produce in that area. However, I have no suggestions to make at the present time. In this area the Ryan, Hellen, and Hass are being generally tried. Although we don't have very much in the way of tree records, we do find many plantings of these three varieties, and since the Hellen is one which is developing in the coastal area, it may be worthwhile for people who want to try some variety which already is doing quite well to try the Hellen as an avocado variety for that district. The Hass and Ryan are being grown in quite a number of areas along the south coastal district, and it would

appear that perhaps they will be successful.

The MacPherson originates in the Encinitas district. Little do we know, however, how that will function and bear. It seems to be functioning in fair shape in the Fallbrook district. The tree is growing very vigorously on Mr. Chenoweth's place.

The Nabal, I have found, is quite favorably thought of, and I have heard men saying they would plant new orchards to Nabals. Some are top-working to Anaheims, and the same thing applies to Carlsbads. There are a few registered seedlings which are being topworked to trees for trial in the south coastal area. Those are the Wurtz, Lois, and Emerald, and the Irving.

In the area mentioned, called the near coastal transitional, we have Fuertes doing very satisfactorily. La Habra Heights is in this section. The Hass and the Ryan originate in that district and are being tried out in large numbers, and in orchards of pretty fair size in that area. The Edranol may not do so well; that is, it has more of that corkiness mentioned before.

In the near coastal area, especially in Rivera district, the Edranol may be quite satisfactory. The Hellen appears to be a possibility, and might be worthwhile if somebody wanted to gamble on another variety.

In the intermediate district, the Fuerte is quite a satisfactory fruit; and many plantings of the Hass and Ryan have been made here, too. There may be some question as to whether the Hellen will be as satisfactory in that area.

In the inland district, where the Fuerte does quite well, there are many plantings of the Ryan. That is the district where the Henry's Select originates, and there are sections in the foothill district where the Henry's Select gives some indication of bearing fruit, and bearing fairly early, although as suggested by Barrett, we have very few records, so far, on the production of this variety.

The Hass and the Hellen are being tried out in that inland area, in spite of the fact that it is not coastal. However, I have seen the Hellen growing well there, and this year the trees are only two or three years old and they have a very good crop.

In the interior, we have a question in our minds, and I have difficulty in talking to people in that area, especially in Riverside, and discussing with them the varieties to try out in that area. We can always suggest certain Mexican varieties, such as Mexicola, and we can suggest Henry's Select; also the Duke has been planted quite considerably in the interior section. However, the Duke does not seem to be bearing as satisfactorily as we had anticipated. So we have difficulty in that area. However, I know of plantings of Fuertes in that area where they are protected from the wind, where that variety is doing satisfactorily; at least during the last two or three years they have been bearing fairly well. But I have only been in that district a matter of two or three years, and during that time have not had extreme records of heat. Maybe when those trees go through a severe hot spell, we may find that the Fuerte is not quite so good as some indications point to at the present time.