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THE AVOCADO MATURITY MARKETING AGREEMENT

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At the meeting of this Society here in 1954 I presented a paper entitled "The Federal Avocado Marketing Agreement." This outlined the reasons we needed a Marketing Agreement, the history of our efforts to solve our avocado marketing problems, and it described the nature of the Agreement. We had been operating under it only a few months then, so that was all that could be said at the time. Now we are in our fourth season of operation, and it is time to report to you how well this complex and difficult arrangement is working out.

I'm glad to be able to state that our Marketing Agreement is succeeding as well as the most optimistic of its advocates could have hoped.

Briefly, our objectives, then and now were limited primarily to measures which would stop the shipping of immature fruit and culls. We hoped also to improve market acceptance of our fruit by shipping it in standard, uniform containers, and by taking steps to send the crop to market in a more orderly manner.

The first step, and prerequisite to the others, was regulation of maturity. We have not yet been able to develop a workable quantitative test for maturity, and we have consistently refused to resort to the subterfuge of adopting an unrealistic test such as a minimum oil content, for the sake of by-passing this difficult hurdle. The empirical method of assigning a schedule of dates for each variety, with a minimum weight permitted after each date, was used at the start, and it has been far more satisfactory than any alternative which has yet been suggested. We consider each variety separately, and assign it a calendar date before which it may not be shipped. That is the "A" date. After the "A" date only fruit larger than a specified minimum weight, such as 16 ounces, may be shipped until the next date, the "B" date. After the "B" date fruit 2 or 3 ounces lighter may be shipped until the "C" date, when the minimum is again reduced a few ounces. Finally, when we are sure all the fruit of that variety will be mature, we release it from all size restrictions, although it is not exempted from grade regulations, which of course cover all fruit which is shipped. Forty-five to fifty varieties, comprising over 95% of the entire crop, are regulated this way. The remainder, seedlings and very minor varieties, are regulated by two sets of the same kind of schedule — one for West Indian varieties, which mature in summer and early fall, and the other for the hybrid and Guatemalan varieties which mature later. These two schedules, being designed to cover a wide range, cannot do as accurate a job as the regulations for specific varieties, but they are moderately effective. They have been improved this season by a rule which empowers the inspector to subject fruit which resemble a regulated variety to the schedule imposed upon that variety, thus removing them from the seedling class as far as the regulations are concerned.

Making out such a schedule is a hard job. The list of dates and weights for one season fills a legal-size sheet of paper. The work is entrusted to a Sub-Committee on Maturity, which carefully considers the many factors which influence maturity, trys to profit by past experience, and then delays' making a final recommendation until only a few weeks before the variety is ready to go, in order to make the schedule as accurate as possible. We take samples of the fruit before it is permitted to be shipped, and also during the shipping season, allowing them to soften and testing them for palatability. This is a lot of work, and we have been fortunate in having the assistance of the U.S.D.A. Agricultural Marketing Service Laboratory and staff under Dr. Paul Harding. At first the fruit was sent to Dr. Harding's laboratory at Orlando, but now a fine laboratory, staffed by four specialists, has been established at Chapman Field, in Dade County. This organization has been invaluable, supplying information on general methods and on specific questions, and helping resolve doubts and differences of opinion among the members of the Avocado Administrative Committee with advice and pertinent data.

Dr. Harding had not been doing this work long when he made the observation that there seemed to be at least as good correlation between diameter and maturity as there was between weight and maturity. As it would be easier for pickers to use a minimum diameter than a minimum weight, we worked out the ratio of diameter to weight for most of the varieties, and allow it to be used alternatively to the weight. Now many of the picking crews carry ring gauges of the proper size, just as is sometimes done with citrus. The method seems quite as accurate as the weight criterion, and is much more convenient for field application.

Dr. Harding and his organization have been of great help to us in another respect, too. In 1954 the Federal Statute under which our Marketing Agreement operates was amended to require that imports of foreign fruit which compete directly with domestic products that are regulated must meet essentially the same guality standards that are imposed upon the domestic fruit. Cuban avocados thereupon became subject to our grade standards and to maturity regulation. This latter was difficult because of the nature of our maturity laws, and the fact that most of the Cuban crop is a mixture of unnamed seedlings. We had to work out blanket regulations for the Cuban avocados which would permit the mature fruit to be shipped and keep out the immature. Dr. Harding himself visited the production area in Cuba in June, 1955, in company with our Maturity Sub-Committee, to help us set up effective and equitable regulations. The resulting recommendation was a schedule of three dates, rather like that for our West Indian seedlings, starting in mid-June, which permitted progressively smaller fruit to be shipped as the season advanced. These regulations were adopted too late that year to use the first date, but regulations in the years following have been on the same basis and have started in mid-June. Since then the facilities of Dr. Harding's department have been available to us at all times, and we have received much help from them in checking on the maturity of the Cuban imports. We find that both the Cuban exporters and the Secretary of Agriculture here are more willing to accept the suggestions of Dr. Harding's group than they are to use the recommendations of the Florida Avocado Administrative Committee, as we may be suspected - unjustly, of course - of attempting to use this Agreement to gain unfair advantage over our Cuban competitors. The chief result of this application of quality control so far seems to be that the Cuban fruit has been much better than it used to be, and it brings higher prices in our markets.

Of course we benefit by not having our markets demoralized by the dumping of inferior Cuban avocados, a condition which used to occur in the principal seaports each season.

In the course of four years of experience we have learned a lot about handling this kind of maturity regulation. There are always individuals who are happy to point out our errors, and while the industry as a whole supports the program, our regulations are always under close and not entirely friendly scrutiny. If we hold a variety back longer than it should be held, there are sure to be irate growers or shippers present at the next meeting to confront us in our error with samples of the variety which have ripened satisfactorily at an earlier date. Or if we permit a variety to be shipped too soon, those who do not have it but have plenty of some competitive variety will accuse us of favoring the one we slipped on by a week or an ounce. So we do a lot of testing ourselves, and of course that is the best way to learn.

We have found out a number of things we didn't know when we started. For instance, at a given weight a short, "fat" fruit is more likely to ripen properly than a long, "thin" fruit. There are indications that the fruit from vigorous trees will be slightly larger than the fruit from harder trees. In a dry season the fruit is smaller but it ripens at about the same time. In dry years immature fruit tastes bitter and tends to shrivel, whereas in a wet year like this one immature fruit is mushy when it softens, and while it will shrivel, too, there is a greater tendency for it to rot at the stem-end. Speaking generally, the date of ripening seems to be associated with the time the fruit is set in the bloom, and the size at which it is acceptable on any specific date is influenced more by the weather, the amount of fruit on the tree, and the care given the tree.

When this system of maturity regulation was adopted four years ago, it was predicted that even though we might start out with a schedule sufficiently strict to insure that only mature fruit could be sold, it would not last. There would be constant pressure to relax the regulations, and no corresponding pressure to maintain high standards, and as vears went by the schedules would be relaxed by a sort of erosion process to the point that they would be worthless. Let us see what has actually happened. A few of the dates have been made earlier, but only in cases where it has been demonstrated that the varieties affected do indeed ripen earlier than the original schedule permitted them to be shipped. Sizes have not been reduced, however, and in several cases they have been increased. One year we changed the dates on the Booth 3 variety to two weeks earlier, but we were dissatisfied with the result, so the next year we moved them back again. In another case there was a welter of debate about advancing the dates for Booth 8, in order to permit a more even flow of fruit to market. The debate ended with the Booth 8 dates unchanged, and the dates for Lula moved backward! What happened was that we decided that maturity conditions would not permit advancing the Booth 8 dates, but that the even flow of fruit to market could be achieved with no violation of quality nor any hardship to growers by holding back the movement of Lulas for a few weeks. I will cite one more instance, again with the Booth 8 variety. The first regulations permitted shipment of 14 ounce fruit on September 15, 12 ounce fruit on September 27, and restrictions were taken off completely on October 10. That was a big improvement over conditions before the Marketing Agreement went into effect, when solid truckloads of Booth 8's were shipped as early as August 15. Now let us look at the "erosion" which

has occurred since then. In place of 14 ounce fruit on September 15 we permit 15 ounce fruit on September 16; in place of 12 ounce fruit on September 27 we permit 13 ounce fruit on September 30. Then we go to 11 ounces on October 14, 10 ounces on October 28, and hold that minimum until November 18, when all size restrictions are removed. This is fairly typical of the schedules for all varieties. Make no mistake; we are determined to market mature fruit.

The effort and the self-discipline necessary to make this method of maturity regulation work have been considerable. It is working, though, and we have been able to go on from this to other desirable reforms. Three grades have been established, and the number three grade, which is a high-class cull grade, has not been shipped since the grades were adopted. Also, under the Agreement we have regulated containers. Three years ago fourteen different kinds of container were used; now we have a standard four-fifths bushel box, and a shallow and a deep lug of about one-fourth bushel capacity, with a minimum weight of fruit required to be packed in each. There have been some screams from shippers who were trying to benefit by the lack of standardization, but the regulation has remained, and it has unquestionably helped us at the other end of the line. As I said at the beginning, these have been limited objectives, and they have not solved all our problems by any means. But we believe that by improving the quality of our product and by marketing it in uniform containers we are helping the consumers get better fruit for their money, and this will ultimately result in our getting more money for our fruit.