

Equivalent to the 'first of the months of the year' are two criteria. First the feast of weeks, and tabernacles must be in 'a circuit of the year,' and second the first month is to be tied as close as possible to the normal appearance of green barley in the ear before the spring equinox. The normal time for the barley keeps the first month from coming too late, and the 'circuit of the year' rule keeps it from being too early. These rules only allow precise inter-calculation in accord with Gen. 1:14 if 'circuit of the year' means the equinox, and 'the aviv' means the normal or 'set time' of its appearance. The barley criteria wants to pull the month before the equinox, and the 'circuit' (tequfah) criteria keeps the middle of the month after the equinox. Between the two rules there is no ambiguity left in any years.

"Observe" or better "Guard" (Deut. 16:1) "the month of the aviv" means to use the criteria of the "spring", and the other criteria to keep the first month accurate at its set time. This requires that we must go by the normal time of the green ears, that is, note the fact that the green ears normally appear before the equinox. It would be impossible to establish a consistent and unified calendar on the basis of observing barley out of its normal time in just one year. The season of the green barely is much longer than just one month. The relevant fact is that the aviv state of dry land barely normally peaks before the equinox. Observation of barley is only part of the criteria for determining the first month. It must be realized that it is a limiting criteria. It limits the first month from falling too far after the equinox. On the other hand, the 'circuit of the year' limits the first month from falling too far before the equinox. Where the Karaites get into trouble, is they try to settle the whole question with barley alone, and end up with an arbitrary and inconsistent calendar.

The historical account of how the Sanhedrin set up the calendar shows that abnormal factors such as famine and cold were given as reasons not to intercalate the year against the equinox rule.

It is the normal time of the barley, on a year over year basis, that sets the lower boundary of the first month. The fact that the Karaites use 'averaging' when determining the 'aviv' admits to this principle. It is just that they average in one year instead of many, and therefore end up contradicting the upper bound criteria that the Passover fall in the 'circuit' of the new year. By averaging in one year, they are admitting to the principle that aviv must be defined by a certain amount by a certain time. It is not that the principle is wrong. It is that their application of it leads to contradiction and confused intercalation. One could debate for eternity on how much Aviv in any one given year is 'enough'; The Karaites seem to require more than is needed for the wave sheaf offering. However, what one cannot debate is that that substantial aviv is always ready before the equinox in a normal year. This is a rule that can securely place a lower boundary on the 'first of the months'; The Karaite method is thus like a ship with one propeller broken. It will always tend to go too far in one direction. With both propellers intact the ship goes straight. So we need to stick with that one characteristic of green barley that is constant on a year over year basis, and admit the other criteria stated in the scripture. (The Talmud also defines the year in terms of normal barley by rejecting the addition of Adar II in famine (drought) years and unusually cold or snowy years.)

This depends on knowing when the normal time for the appearance of the barley occurs, determined by observations over a period of years, and not from observations in just one year. This explains then, why the Karaites are incorrect to

depend on irregular observations from just one year. Obviously Ezra knew the normal time of its appearance, but not when it appeared in that year, but he was safe in going by the normal appearance, and hence the first month is placed a few days before the equinox, which would be contrary to local methods in Persia (assuming they followed the Babylonians). We already know that the Tishri year being used was contrary to the local use of the Nisanu based year.

Deut. 16:1 says to "Guard the month of the Aviv"; it does not say 'new moon' because the events in the context are described as occurring in the 'month' and not on the new moon day. The Aviv, therefore, is related to the whole month, and not the new moon day. The month derives its name "the Aviv" from the fact that the actual month of the Exodus was when the barley was green. And the text says to "Guard the month of the Aviv," which means to keep its 'set time' (moed) on the anniversary of the Exodus. It means to guard the set time of the month, and implies that barley is a factor. "Aviv" is like our word "spring," etymologically referring to plants, but really meaning the first day of spring at the equinox.

Therefore, those Karaites who seek to find Aviv before the 'new moon' cannot have any knowledge whether it will appear in the middle of the month by only observing one year. They thus sometimes postpone the month to the second month of the year. On the other hand, if they find the Aviv in any one given year too early, then they will ignore the fact that the Aviv state continues for more than a month after, and they cannot know exactly how long it will continue in any one year. They will declare the month too early in Adar, and the new year will not begin by the Passover feast, since the equinox will be before it.

They will thus admit three definitions of *first month*, (1) the month with only a few days in the new year, (2) the month with most of its days in the new year, and (3) the month with all of its days in the new year! And this is only because they do not understand when the 'set time' of the 'first month' is, which has to be according to the Exodus year.

The Scripture commands that,

וְחָג שִׁבְעַת תַּעֲשֶׂה לָּךְ
בְּכוּרֵי קִצִּיר חֲמִים וְחָג הָאֶסִּיף תְּקַיֵּם הַשָּׁנָה:

"And feast of weeks you shall observe for yourself, first fruits of the harvest of wheat, and feast of ingathering (a circuit of the year)" (Exodus 34:22).

This phrase 'circuit of the year' means the path of the sun making one cycle from the spring equinox in the heavens and back to the spring equinox again. The countings of Shavuot begin with the 16th of Aviv after the Passover Sabbath. By placing the first month so that the majority of its days are in the new year, that is after the equinox, ensures that Passover, and the feast of weeks, and the feast of Tabernacles will fall in the circuit of one year.

If the first month is placed too early, then these feasts will not all fall in the 'circuit of the year,' but in the circuit of two years. The 'circuit' (Tequfah) is a word specifically tied to the motion of the sun in the Scripture; it is never used with reference to the moon. Also, the sun literally defines the length of the year, which begins with the 'turn of the days' at the spring equinox, when day and night are equal.

In this text it is pointing specifically at the feast of weeks as falling in the circuit, and in the following verse it