Sugar to water ratios can be either by volume or weight

## 5 LB. BAGS OF SUGAR

Note:
A 5 lb . bag of sugar will fill three (3) quart canning jars
A typical quart canning jar will actually hold about 3 cups of sugar. Not a full quart.

## 5lb. bags of sugar

1:1 Mix a 5 lb . bag of sugar with three (3) quart canning jars of water. (yields a little over 4 canning jars)
1: $1 \frac{1}{2}$ Mix a 5 lb bag of sugar with two (2) quart canning jars of water. (yields a little under 4 canning jars)
$2: 1$ Mix a 5 lb . bag of sugar with $\underline{11 / 2}$ quart canning jars of water. __(yields 3 canning jars of syrup)
2:1 Mix 4 parts of sugar with 2 parts of water using any measuring container.
4 Lb. bags of sugar (Four pound bags are becoming more common)
When using a 4 Lb . bag, reduce the amount of water to $80 \%$ of the above 5 lb . bag amounts or as below:
A 4 lb bag of sugar contains 2 canning jars plus $1 \frac{1}{2}$ cups of sugar.
To prepare a 1:1 ratio: add $2 \frac{1}{4}$ canning jars of water to 4 lbs of sugar
To prepare a $11 / 2: 1$ ratio: add $11 / 2$ canning jars of water to a 4 lb . bag of sugar
To prepare a 2:1 ratio: add a little over 1 canning jar of water to 4 lb . of sugar. (yields about $21 / 2$ canning jars)

## 10 LB. BAGS OF SUGAR

1:1 Mix a 10 lb . bag of sugar with six (6) quart canning jars of water. (yields a little over 8 canning jars)
1: $1 \frac{1}{2}$ Mix a 10 lb bag of sugar with four (4) quart canning jars of water.
2:1 Mix a 10 lb . bag of sugar with three (3) quart canning jars of water.__(yields 6 canning jars of syrup)
2:1 Mix 4 parts of sugar with 2 parts of water using any measuring container.

## WHEN TO FEED THE BEES:

1. Feed bees a $2: 1$ ratio in the fall if they do not have enough honey to last them thru the winter.
2. Feed bees a $1: 1$ ratio in the early spring if they do not have enough honey in the hive. Be careful to not over feed the colony in the spring because the bees will store the syrup in the cells that the queen needs to lay eggs. This will contribute to early swarming.
3. Feed bees when you are hiving a package of bees especially if on foundation. $1 \frac{1}{2}$ ratio is good for spring
4. Feed bees if you are making a split and there is not enough honey to give them a strong start or if you are starting the colony on foundation.

NOTE: Use warm water to help dissolve the sugar but do not get the mixture too hot.
Do not burn the sugar because it is toxic to the bees.

