

## Activity-41: Seeds in fruits

### Aim:

To find out the number of seeds in different fruits.

### Reason for Experiment:

Cucumber and Brinjal have several hundreds of seeds. Even if you plant all of them, only 1-10 will successfully give rise to a new plant. This is the reason why they produce so many seeds-so at least a few survive.

### Procedure:

Make a 2 column table. Fill one column with different fruits you will be studying. In the second column you will find out and write down the number of seeds

Fruit	No. of seeds.
...	...

For example:

Coconut, mango, grapes, amla, dates and cherries are some fruits with only one seed.

Lemon, Orange, Sapodilla (zapota), Apple, custard apple (seethaphalam) are fruits with more than one seed but countable. **By eating these fruits you can directly count the number of seeds.**

**How to find the number of seeds in a bottle gourde (Sorakaya), Okra, water melon?**

### Method:

As an example try finding the number of seeds in Okra.

Take an Okra, and find the length from tip to tip of the part eaten. You should not include the stalk. Denote it by L

Now separate 3 slices from the okra each 1cm in length.

Now slowly tear apart these 3 slices using a blade and count the number of seeds in it. Denote these counts as  $s_1$ ,  $s_2$  and  $s_3$ . take an average of all the s.

The total number of seeds in Okra of length L cm is:

$$\text{Total seeds} = ((s_1 + s_2 + s_3) / 3) * L$$

Now try repeating this experiment for a cucumber. Since it has even more of seeds you should make slices of  $\frac{1}{2}$  cm so that your counting is less laborious.

**Here is a table of some fruits. Try to find out the number of seeds:**

Fruit	No. of Seeds	Fruit	No. of seeds
Mango		Grapes	
Amla		Cherry	
Coconut		Lemon	
Zapota		Custard apple	
Pomegranate		Ivy gourd	
Bottle gourd		Cucumber	
Chilli		Capsicum	
Snake gourde		Beans	
Peas		Pumpkin	
Papaya		Banana	

**Questions to think:**

Did you find any seedless fruits in the market? How can a plant produce fruits but no seeds? Discuss with your teacher.

