

TIC TIC SALINE SPLASH FOR SALADS



ACKNOWLEDGEMENTS

I thank **Almighty**, for the blessings showered on us in every step of this venture.

I thank my parents for their support.

I would like to express my heartfelt gratitude to the **M.S group of institutions** for its great support on experiment instruments. These instruments had greatly facilitated my project. I would also like to express my profound gratitude to **Mr. Syed Misbah Uddin**, Executive Director of **M.S Group of Institutions** for his constant and valuable suggestions.

I owe a deep depth of gratitude to my Principal **Mrs. Naheed Sultana** for supervision and providing all the resources to complete this work successfully.

I sincerely acknowledge the support, valuable advice and encouragement of **Mrs. Sadiya Samreen** (science HOD –CARD CELL)

I am indebted to science Department of my school under whose guidance, constant supervision this thesis work entitled **TIC TIC SALINE SPLASH FOR SALADS** has been carried out.

LIST OF CONTENTS

S.NO	List of Contents	Page No
1	Introduction	4 – 6
2	Hypothesis	7 – 8
3	Materials required	9 – 10
4	Result	11 – 12
7	Graph	13 – 14
8	Application, Conclusion & Bibliography	15



Introduction

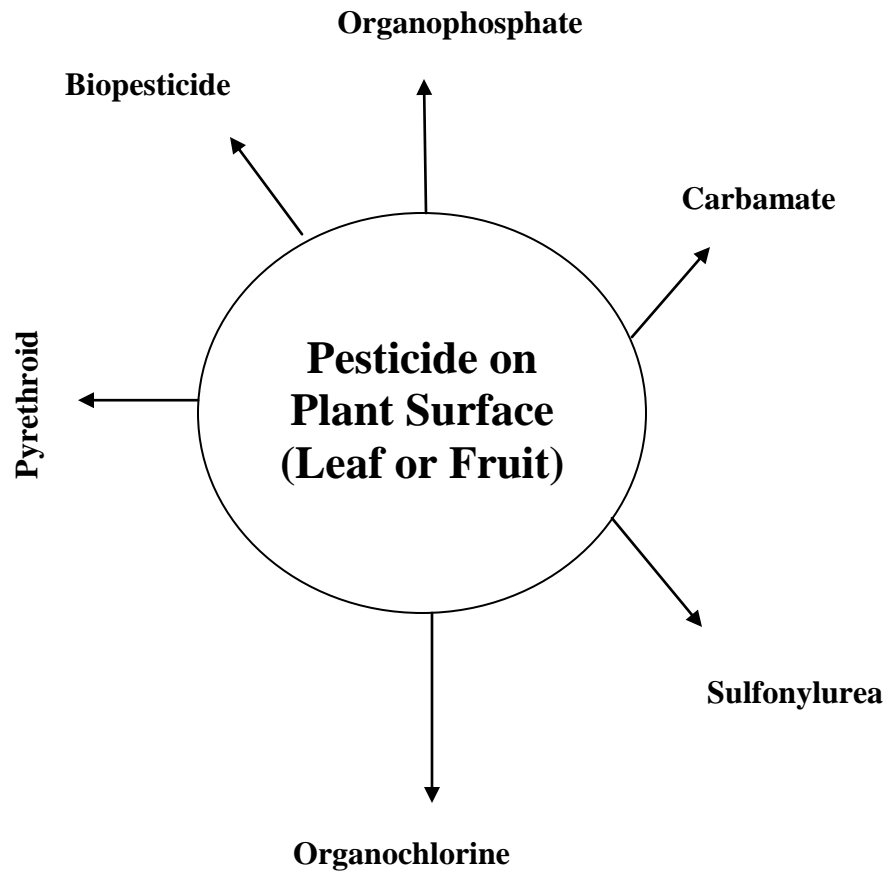
Introduction:-

In today's world growing need for food and increased demand has resulted in exploitation pesticides.

Believe it or not, pesticides might be present in fruits and vegetables we eat. They are primarily used during the cultivation of crops and in some cases may remain as residues. Recently many advocacy groups and NGOs conducted random testing on fruits and vegetables and found unacceptably high amounts of pesticide residue in them. According to the Centre for Science and Environment (CSE), "high levels of pesticide residues can be toxic enough to cause long-term cancer, damage to the nervous and reproductive systems, birth defects, and severe disruption of the immune system."

While steps are being taken by the government to sensitize farmers and vendors about the side effects of using pesticides, health experts suggest consumers explore alternatives like organic food. Even though the mere presence of pesticide residue in food does not imply that they pose a great health risk, you should be extremely careful of what you buy and where you buy it from. You should also take certain measures to minimize any kind of health damage. Here are three simple, do-it-yourself tricks you can adopt at home:

Wash all your fruits and vegetables. According to the CSE, washing them with 2% of salt water will remove most of the contact pesticide residues that normally appear on the surface of the vegetables and fruits. Almost 75 to 80 percent of pesticide residues are removed by cold water washing. Also, be more thorough with these fruits and vegetables in specific: grapes, apples, guava, plums, mangoes, peaches and pears and vegetables like tomatoes, brinjal and okra as they might carry more residue in their crevices.



HYPOTHESIS

Hypothesis:-

5 Mins of washing the fruits and vegetables under running water is effective time.

Purpose:-

The purpose of this experiment is to find an effective time of washing fruits and vegetables to get rid of pesticides from peels.

Question:-

What is the effective time of washing fruits and vegetables?

Variables & Constants:

Constant- Time of washing .

Amount of water used for washing.

Depending variable-Type of fruit & vegetable.

Responding variable- Amount of pesticides

MATERIALS REQUIRED



Materials Required:

Beakers-2

Tub-3

Tap water -200ml each(1200 ml)

Salt water-200ml each(1200ml)

Measuring jar-100ml-1

Timer-1

Apple-3000Grams

Guava-3000Grams

Fig-3000Grams

Carrot-3000Grams

Tomato-3000Grams

Cucumber-3000Grams

Method:

- I took 500grams of apple, guava, fig, carrot , tomato and cucumber.
- I washed 500gm of apple in 200ml of normal tap water for 5mins,10mins and 15mins.
- I repeated the process for all the above mentioned fruits and vegetables.
- I collected all the 36 samples of wash and labeled them.
- I sent it to the laboratory for testing amount of pesticides in each sample.
- I also sent a blank sample of water (tap and salt water) for pesticide testing.

RESULT

Result:-

S.no	Fruits/Vegetables	Blank	Amount of pesticide
1	Apple	Tap water	25 – 30%
2	Guava	Tap water	25 – 30%
3	Carrot	Tap water	25 – 30%
4	Tomato	Tap water	25 – 30%
5	Cucumber	Tap water	25 – 30%

S.no	Fruits/Vegetables	Blank	Amount of pesticide
1	Apple	Salt water	75 – 80%
2	Guava	Salt water	75 – 80%
3	Carrot	Salt water	75 – 80%
4	Tomato	Salt water	75 – 80%
5	Cucumber	Salt water	75 – 80%

Data Analysis:

Amount of pesticide

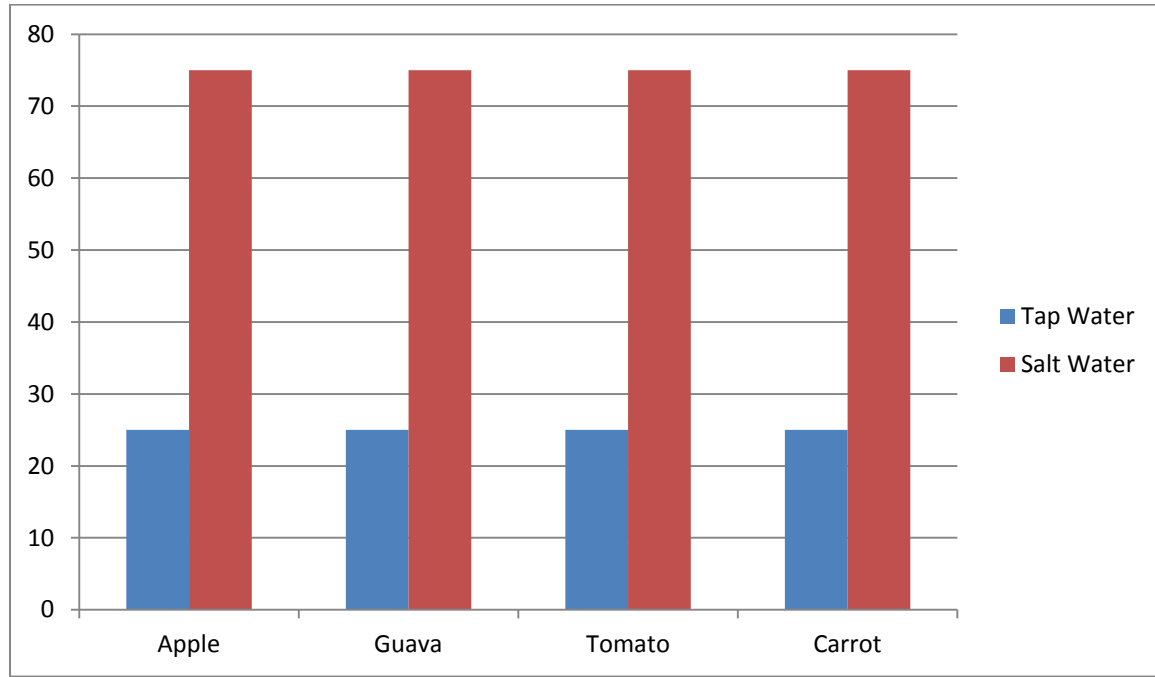
S.no	Type of fruit	5Mins	10Mins	15Mins
1	Apple	25-30%	50%	75-80%
2	Guava	25-30%	50%	75-80%

S.no	Type of Vegetable	5Mins	10Mins	15Mins
1	Tomato	25-30%	50%	75-80%
2	Carrot	25-30%	50%	75-80%

GRAPHS



Graphs:-



Conclusion:

This project include the fact that saline water can remove maximum amount of pesticides used by farmers on fruits and vegetables

Applications:

It can be used as effective treatment to remove pesticides fromfrutis and vegetables which can be hazardous to human life.

Bibliography:

- www.google.co.in