

The Study Of "Toxicological Analysis Of Haridra Siddha Jal (Turmeric Dilution) On Residues Of The Pesticides Sprayed On Cucumber

Author-Dr.Rajeshkumar S. Upadhyay

Professor and Head of Agadanttra and VidhiVaidyak Department (Forensic Medicine and Toxicology) CSMSS
AyurvedmahavidyalayaKanchanwadi Aurangabad M.S.India

Corresponding Author-Dr.Amitkumar Nagorao Rode

(PG Scholar)Agadanttra and VidhiVaidyak Department (Forensic Medicine and Toxicology) CSMSS
AyurvedmahavidyalayaKanchanwadi Aurangabad M.S.India.

Abstract-

The crucial Development of Agriculture means that more and more toxic organic and inorganic compounds are entering in the environment they are particularly dangerous in fruits by which people are exposing to them. A largely used in day to day life fruit Cucumber is also exposing to pesticides.It is therefore important monitor pesticide residue in the fruit Cucumber using all available analytical methods. In ayurveda some vishagannadi drugs (anti poisonous drug) mentioned. A analytical study has taken among this drugs Haridra/turmeric or Cucurma longa Linn. Can remove the toxic residence and external toxicity remains on Cucumber after washing by Haridra Siddha jal or Haridrawater.we are present the Results and conclusion this study.

Introduction-

Now a days in rural areas people largely in agricultural field after the Green revolution people highly exposed to poisons, Agro Chemicals and pesticides.

As per Ayurveda pesticides included in krutrim visha.It is the combination of poisonous and nonpoisonous substance.Most of the Indian farmers use pesticides abundantly and blindly farmers are unaware about the health hazards. poisonous Chemicals people are consuming this toxified crops, fruits, vegetables and they are suffering from various poisonous hazards.Cucumber cucumissativus Linn is a widely cultivated plant used all over the world. it absorbs pesticides which are frequently sprayed on it so here the study arises the need to reduce the toxic residues from this fruit cucumber by dissolving the during washing.In Ayurveda some Vishagnadi drugs are mentioned by Charakacharya has mentioned 10 drugs in Vishagnadigana.

हरिद्रामञ्जिष्ठासुवहासूक्ष्मेलापालिन्दीचन्दनकतकशिरीष

सिन्धुवारश्लेष्मन्ताका इति

दशमानि विषघ्नानि भवन्ति ।

According to Acharyacharak all the 10 drugs have the vishagnaproperties.butHaridra is one of the easily available drug and it is also used in our day to day life so here the study is planned to observe that Vishaghna effectivity of haridra on the

toxic residues and external toxicity remains on cucumber after dhawan by Haridra siddha jal.

हरिद्रा रसे तु तिक्ता रूक्षोष्णा विषमेहनुत ।

कण्डुकुष्ठव्रणाहन्तिदेहव्रणाहन्ति देहवर्णाविधायिनी ॥

विशोधिनी कृमीहरा पीनसारुचिनाशनी

|(ध.नि.गुडुच्यदि वर्ग 21|55)

Haridra acts as LekhanDravyaKushtaghna and Vishaghna has been highlighted in Charaksamhita.

Haridra siddha jal preparations

Materials Methodology-

Material

The following materials selected and authenticated for the study.

Fruit- cucumber

Washing drug/Dhawandravya -Haridra siddha jal/
Diluted Haridra Water.

Methodology- Observational analytical study.

1.30 samples of Cucumber has collected from one single Farm only in which pesticide Sprayed

They divided into 3 groups.

2. In each group 10 Cucumber samples selected

Group A- 10 samples had analysed i.e. without Dhawan.

Group B -10 samples had analysed after dhawan by Tap Water.

Group C - 10 Samples had analysed after dhawan by Haridra siddha jal.

Haridra siddha jal has been prepared by standard methodology as highlighted in Sharangdharsamhitamadhya khand.5

We had also conducted physico chemical analysis Ash value, PH,moisture content, volatile fixed oil, determination extractive value,thin layer chromatography.

In the Residual analysis foreign matter, pesticide residue and solvent residues has been determined.

Conclusion-

Conclusion is the determination established by investigating in various ways Of physico chemical analysis and residual analysis detecting by means of various reasons.

1. The present experimental study is observational study.
2. After the conceptual study all classical references prove Haridra is VishaghnaDravya..
3. After the analytical observation it was concluded that the Cucumber was free from pesticides.
4. In this study Haridra siddha jal washed 10 minutes, soaked in Haridra Siddha jal gave highly significant results,however considering the feasibility in day to day practice 10 minutes Soak and washed is the better time saving and efficient option.
5. besides that tap water washed and sample rendered significant results to reduce pesticide residue of chlorpyrifos.
6. Thus, haridra siddha jal is an efficient dhawandravya to wash off pesticides residues of chlorpyrifos.
7. It will be advisable to wash cabbage with 10 minute soaking in haridrasiddh instead of water in household practice.

The mean values of pesticides residue all samples of experimental group are

1. Simple as it is i.e. unwashed -0.01175
2. Sample washed with tap water -0.00542
3. Sample washed with Haridra Siddha jal - 0.005

So it was observed that mean pesticide residue level was least in Haridra Siddha jal washed sample.

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