iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 4 **Issue:** VIII **Month of publication:** August 2016

DOI:

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)

Impact of Waste Flower on Environment

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Abstract: Flowers are a part of both festive and solemn occasions. Flowers play an integral role in weddings and often are the focal piece in a wedding's design. Flowers can help reduce stress and assuage anxiety. The flowers which are offered by devotees in the Temples, Churches, Gurudwaras, Mosques etc, left unused flowers cannot be dumped into the garbage once they wiltered as because many religious beliefs that the flowers which are offered during prayers are sacrosanct. Thus it generates flower waste & impact on environmental pollution. To minimize the adverse effect of this it has to be isolated storage, allowed to decompose and degrade into a harmless state.
Key words: flower, waste, effect

I. INTRODUCTION

Flowers constitute an important article of worship. The word puja meaning worship signifies fulfillment of the prescribed rituals (puryante sarva karmani) and realization of the divine (jayate jnanam atmani). The flowers are offered to the goddess at several stages in devotion. The Mahabharata (Anushasana parva- Section-xcviii) describes the flowers fit for offering to deities:" Customarily, the flowers at funerals bring a sense of silence and exquisiteness to an otherwise heartbreaking occasion. Flowers are of diverse kinds. Some are wild; some grow in the midst of humans and even among them, some do not grow well unless nurtured with great care, are from trees that are not prickly; and some from trees that are prickly Fragrance, beauty of form and taste are also the reasons for their classification. The image in the sanctum is decorated with garlands flowers and with unstrung flowers. Flowers gladden the heart and mind; and confer prosperity. The flowers that emit agreeable scent should be offered to deities. Flowers of plants that are not prickly are generally white in color. Such flowers are acceptable to deities. . "In the U.S., most flowers grown commercially come from climate-controlled greenhouses, and many workers drive to the farm. Every year approximately 80, 00,000 tons of waste flowers are dumped in the rivers in India choking them to death. The pesticides and chemical fertilizers used to grow flowers mixes with the river water making it highly toxic. Various drains and waterways connected to the water bodies also get clogged, creating civic problems of a great magnitude. We always tend to blame the industrial waste but never give a think to flower pollution.

II. DEGRADATION OF FLOWER WASTES

The flower industry recognizes the environmental degradation resulting from the overuse of water, pollution of the lake, and the increasing population in the area , its native hippos are threatened by the pollution in the lake and fish catches are dwindling (putting local fishermen out of business). Reports, however, have demonstrated that the death of fish in Lake Naivasha at the beginning of 2010 was not caused by chemical substances from the flower farms (Kamau 2010, March 7; Ngige 2010, February 25). Criticism has also been concerned with the potential negative externalities of CO_2 emissions from the high frequency of flower produce transport all over the world. Some flower farms have been accused of setting up their grounds on protected wetlands with dire consequences for the original habitats. There are also gender issues and child labour issues - as well as low pay and little job security, the chemicals used in flower growing are a particular threat to a workforce made up largely of women and children. The use of water for flower farming is of course inevitable, and it is an important issue to ensure that enough water is reserved for use of the communities. In 2005 the World Health Organization deemed 36 % of the chemicals applied by Floraverde plantations as tremendously or highly toxic. We know that mixtures of chemicals such as pesticides can have a more potent adverse effect on health than single applications of single substances. More than 66 % of Ecuadorian and Colombian flower workers were plagued by work-related health problems, including skin rashes, respiratory problems, and eye problems, due to chronic exposure to toxic pesticides and fungicides found by a study of International Labor Rights Fund in 2007. Another study found that over 50 % of respondents who worked in fern/flower farms reported at least one of the symptoms of pesticide exposure - headache, dizziness, nausea, diarrhoea, skin eruptions, fainting. According to Richard Wiles, vice president of research for the US Environmental Working Group, consumers are buying roses that, toxicity levels suggest, should be handled by workers wearing gloves. Wiles reports that pesticide residue on the petals of imported roses is fifty times that allowed on food imports. Different economic activities in dairy complex and vegetable & flower market of Ghazipur catchment area, Delhi (India) is producing approx.

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8700kg of vegetable & flower waste on daily basis. Most flower workers are migrants, and live in slums around the city, without sanitation and therefore further polluting the lake with detergent from washing and with human waste. Another important factor that is considered important is picking of the flowers. Flowers can add a huge impact on the environment due to fertilizers used and gas emissions that are released to transport the flowers. Many green wedding planners opt to have their flowers supplied by organic florist or even to grow their own. Another common practice is to consider what to do with the flowers after the wedding. Some weddings have had flowers that are replanted after the big day to minimize waste and allow the flowers to continue to grow afterwards. Pesticide use has decreased somewhat in the years since that comment. But then again figures which measure reductions simply in terms of weight of pesticides per hectare can be misleading since they may not reflect the use of newer more powerful pesticides which are more active at lower doses. According to Flowerpetal.com, which tries to limit the environmental impact of flower purchases, sending the roughly 100 million roses of a typical Valentine's Day produces some 9,000 metric tons of carbon dioxide (CO_2) emissions from field to U.S. florist. The organic wastes from both the units (dairy complex & vegetable market) are broken down by bacterial action in a series of stages that result in the formation of CH_4(methane) and CO_2. The Global warming Potential (GWP) of methane (CH_4) is 72 over a 20 years period or in other words methane is 72 times stronger than CO_2. According to WHO, no segment of the population is completely protected against intended direct or unintended indirect exposure to pesticides and the potentially serious adverse acute and chronic health effects.

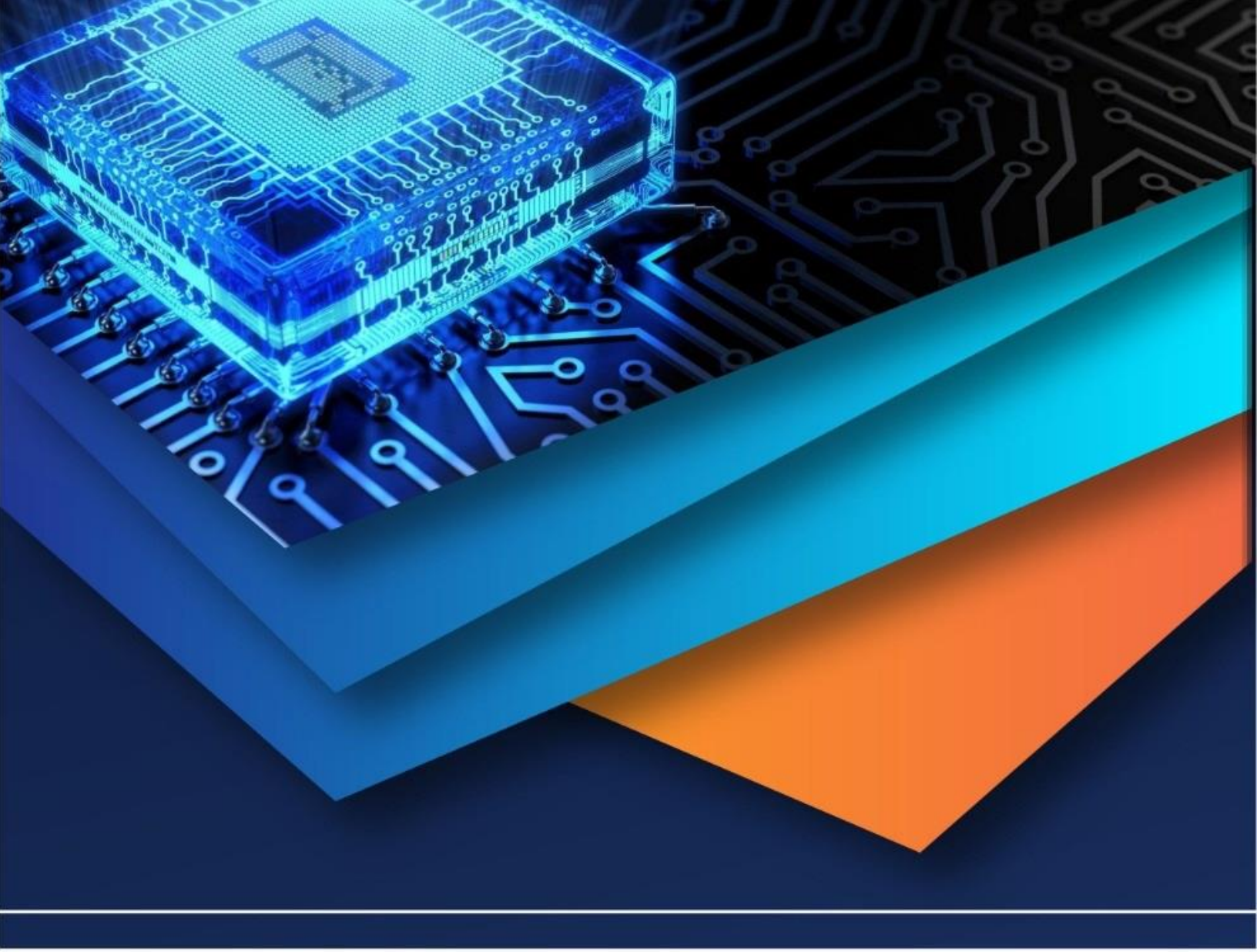
III. CONCLUSION

We have to collect auspicious flowers directly from their place of worship and pamper them with our secret recipe to make incense dough. Although the respondents not working in flower farms had lower incidences of symptoms potentially associated with pesticide exposure, a significant number still either reported or exhibited the symptoms upon clinical examination. This could either be related to exposure to pesticides used in the home or to exposure to pesticides released into the environment from the flower farms and other agricultural sources. Environmental contaminants can arise through using empty contaminated pesticide containers, which still contain pesticide residues, as containers for transporting and storing water; from contaminated foods including fish and other aquatic foods. No one therefore is exempted from the adverse effects of pesticides as long as these chemicals are readily available and being used in agriculture and/or in the home within a given region. Also the flower farm owners and managers should introduce integrated pest management practices wherever possible to reduce exposures to and adverse effects arising from repeated broadcast application of pesticides, a practice that has lost favour because of safety concerns and sprayers should be trained how to use pesticides and this training makes them more cautious about exposures.

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