



الجامعة الإسلامية العالمية ماليزيا  
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ENHANCING QUALITY RESEARCH &

**INNOVATION**

for

**SOCIETAL**

**DEVELOPMENT**



**PP-306      The Secret Behind the Role of Henna Dye in the Traditional Dyeing of Historical Papers**

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During Taimurid and Safawid periods the masters introduced number of dyes for coloring paper for purpose of calligraphy and paintings. Historical analysis was carried out to identify different dyes, shade of colors used, and the application of techniques recommended in paper dyeing process based on Persian historical treatises.

Among the number of dyes introduced by masters Henna has been the most recommended dye with the ratio of 1:10 henna and water. For this purpose a scientific analysis also carried out in two stages to investigate the effect of henna on paper in lower concentration than advice ratio followed by laboratory work in investigating the fungicidal property of henna dye in the advised concentration. Our experiment showed that henna will act as fungicide only higher than the ratio of 1:10 on *aspergillus flavus*. The present study revealed the secret behind the henna concentration that has been stressed on the historical recipes.

**PP-307      Project: Pest control from herbs for display cases and storage purposes**

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natural sources as an alternative to the existing chemicals especially for museum purposes. Pest is one of the main enemies of every museum around the world. They can harm and damage the objects or artifacts in a museum. Pesticides in other word crucially needed to control the pest. But the chemical pesticides does better by not just hazardous to the pest, it is undeniably dangerous to the artifacts and human.

The pesticides from natural sources have traditionally been used since ancient times. In facts they existed years before the chemical pesticides were introduced. It is the first matter used to control the pest. Pesticides from natural sources such as herbs are a very valuable ancient ingredient but not well introduced in Malaysia. Therefore it is aim to publicized the valuable of an ancient ingredients to benefits the generation of today and in the future.

With an intention to control and prevent the museum artifacts from pest attack, the project shall attempt to study the pest, pesticides and the herbs as the alternative pesticides.

**PP-315      Qotoa**

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The Universal design is relatively new paradigm that emerged from barrier free design. The worlds tend to forget the disable condition and unfortunate environment while always focusing for normality and perfect condition. Handicap is a person if he or she has physical or mental impairment which has record of such impairment or is regarded s having such impairment. This project is focusing on one handed people which having a problem living in the world of two handed people where most of the products use with both hand.