

الآية

قال تعالى:

أَنْزَلَ مِنَ السَّمَاءِ لَكُمْ مَاءً لِيُحْيِيَ الَّذِينَ كَفَرُوا فَبَدَّلَ اللَّهُ أَمْثَلَهُمْ كُفْرًا فَاصْبِرُوا لِحُكْمِ اللَّهِ إِنَّ اللَّهَ لَا يُهْدِي الْقَوْمَ الظَّالِمِينَ
يُوقِدُونَ عَلَيْهِ فِي النَّارِ ابْتِغَاءَ لِنِيبٍ وَمَتَاعٍ زَبَدٌ مِثْلُ الخُبْزِ لِيَضْرِبَهُ اللَّهُ الْأَظْفَارَ
وَالْأَبْطَالُ قَوْمًا لَازِبِينَ هَبْ جُفَاءً أَمْ أَيْنَعْنَا نَسْفِيَهُمْ كُتُبًا فَلْيَرْضَ كَذَلِكَ
يَضْرِبُ اللَّهُ الْأَمْثَالَ

صدق الله العظيم
سورة الرعد الآية 17

DEDICATION

To my motherMy first teacher

To my father My hero

To my brothers, sisters

To my friends

To all those unbelievable persons

I am trying to say thank you

Acknowledgement

Firstly, I am deeply thankful to Allah for his almighty...

*Also I am grateful to **Dr. Mohammed Almubarek***

For her advices and help until I finished this study...

Abstract

In this research five samples of dyes which used as henna or Tatto dyes used by women had been qualitatively analyzed to detect the PPD concluded these tints for the quantity heavy elements and it concentration on the samples a quantitative analysis had been procedure.

List of contents

Subject	Page
Dedication	I
Acknowledgment	II
Abstract	III
Contents	VI
Chapter (1) Heavy metal (Pb, Ni, Co, Cr)	
1-1 Chromium	1
1-1-1: Historical and occurrence of chromium	1
1-1-2: Properties	1
1-1-3 Uses	3
1-1-4: Compound of Chromium	3
1-1-5: Chrome Tanning	6
1-1-7: Health effects of chromium	6
1-1-8: Environmental effects of chromium	8
1-2: Lead	10
1-2-1: Historical	10

1-2.-2: Occurrence	
1-2-3: Properties of Lead	10
1-2-4 Uses of lead	13
1-2-5 Compounds of lead	13
1-2-6: Paints and Pigments	15
1-2-7: Health effect of lead	16
1-2-7 Health Risks of Lead Exposure	16
1-2-8: Sources of Lead Exposure	17
1-3: Cobalt	20
1-3-1: Historical	20
1-3-2: Occurrence	20
13-3: Properties	20
1-3-4: Uses	22
1-3-5: Compound of cobalt	22
1-3-6 complex of cobvalt	23
1-4 Nickel	23
1-4-1 Historical	23
1-4-2: Occurrence	24
1-4-3 Properties	24

14-4-Experiments	26
1-4-5 Uses	26
1-4-6 Alloys of nickel	26
1-4-7 Compound of nickel	27
Chapter (2) Dyes	
2-1 Hena Powder	29
2-2 Dyes	30
2-2-1 Organic dyes	31
2-3- Chemical classification	33
Chapter (3) PPD	
3-1 Para-Phenylenediamine (PPD)	36
3-2- Chemical/Physical Properties	36
3-3- Production	38
3-4 Uses	38
3-5- Safety	39
Chapter four (4) Result and Discussion	

4-1 Materials and Method	41
4-2 -Procedure	41
Result of A.A.S	42
4-5- Qualitative analysis of PPD by using TIC	42
4-6-Discussion	44
Chapter four (5)	
References	
Reference	45