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Evaluation of Physico-Chemical Properties of *Schleichera Oleosa* Amide

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Abstract: *The present study was aimed at investigating the physicochemical properties of the Schleichera oleosa (AMIDE) such as Emlsyfying, Weting, pH, Viscosity, Foaming Power, Surfacetension we have chosen Preparation of amide by diethynelamine, heat it with 190ºC for 30 min by refluxing unit. Kusum amide emulsyfying power minutes varied from different dilution 0.1-10% is 6.45 to 16.3, Surfacetension varied from different dilution 0.1-10% is 0.094to 0.069, foaming power varied from different dilution 0.1-10% is 5.3to 7.0, Viscosity varied from different dilution 0.1-10% is 1.03to 1.29, pH varied from different dilution 0.1-10% is 9.73to 10.67, Weting power varied from different dilution 0.1-10% is 6 to 9.20.*

Keywords: *Concentration, Power, Viscosity, Foaming Power, Minutes Surface tension, Ph.*

1. INTRODUCTION

Fats and oils are one of the five indispensable ingredients of human watch your waistline and the others are protein, carbohydrates, minerals and vitamins [1]. In a evenhanded diet, the oils and fats prerequisite per individual per day is 35 g for vegetarians, 39 g for non-vegetarian and 38 g for regular diet. Oilseeds and animals are the chief sources of fat [2]. Although India has the largest quantity of animals compared to any particular country of the world, but the animal fats are not number one and our efforts to exploit fats of land and nautical animals are unimportant [3]. The major accountability of oil invention in India, both for edible and industrial usages depends on vegetable oil söeds production. In the global context, India is one of the major producers of oilseeds which are the succeeding major agricultural crop in stipulations of tonnage and value [4]. In fact India enjoys a head of government position in the world, occupying over 15 percent of its cropped area, secretarial 10 percent of the total global productivity of the vegetable oils and fats. The most important oilseeds of India are groundnut, rape beginning mustard, linseed, sesamum as well as castor [5]. Groundnut and rape seed mustard description about 85 percent of the total fabrication of oilseeds in the motherland. In other words, groundnut among the most important oilseeds is accounted as about two-third, mustard beginning one fourth of linseed and sesamum five perent of castor, and three percent of full amount construction [6]. Soybean, sunflower, safflower, cotton seed along with coconut are the other imperative oilseeds fashioned in India. For handing out of oilseeds and oil bearing materials, India has a large network of oil employing supplementary than 10 million people. Oil milling industries at nearby, consist of about 0.25 million community ghanies, 50,000 supremacy driven ghanies, 50,000 perfunctory expellers, 360 solvent extraction plants and 90 vanaspati units [7]. The installed capacity of oil mills is expected as 35 million tonnes per annum above and beyond, there is solvent pulling out plants of about 6.8 million tones per annum aptitude in the fatherland [9].

Inspite of a assortment of oilseeds grown, other oil attitude materials produced, and a massive network of oilseed processing manufacturing exists in the organised sector, shortfalls of oils in India has become a melancholy tale. living being an exporter of oil till 1964, it is a contradiction that at in attendance India has to introduction a big quantitly of vegetable oils to congregate her familial need and thus expenses about ten thousand million Rupees in stipulations of exceedingly valued foreign switch over every year [10].

The seven most important constraints i) In-efficient handing out (ii) inadequate exploitation of some oil bearing materials such as rice bran, (iii) unscientific and derisory storage, (iv) development of oilseed based proteins, (v) ineffective and expensive covering, (vi) inadequate research and progress, and (vii) troubles in exporting oilseed materials are the life-size hurdles in increasing oil yields in this century which need awareness [11].

2. METHODOLOGY

2.1. Determination of Physico-Chemical Parameter

A. For the Determination of Viscosity

Firstly prepare the desire solution of different concentration than measure it under viscometer in triplicate.

B. For the Determination of Electrical Conductivity

Prepare the desire solution of different concentration than measure it under Electrical Conductivity meter in triplicate.

C. For the Determination of PH

Prepare the desire solution of different concentration than measure it under pH miter in triplicate.

D. For the Determination of Surface Tension

Prepare the desire solution of different concentration, than measure the weight of 20 drops of sample and water also, before that take the weight of blank gravity bottle finally calculate the surface tension by formula.

E. For the Determination of Emulsifying Power

Firstly prepare the desire solution of different concentration than mix it with liquid paraffin wax 10 ml shake it with 10 time and leave it for till saperate the layer simultaneously note down the time to spend into the layer separation, repeat the same experiment in triplicate.

F. For the Determination of Wetting Power

Firstly prepare the desire solution of different concentration than prepare the equal weight of misline cloth and leave it into upper side of the different solution, note down the time taking to complete wetting of misline cloth. The same experiment repeat in triplicate.

G. For the Determination of Foaming Power

Firstly prepare the desire solution of different concentration than transfer it into 50 ml of measuring cylinder and shake it 10 time and note down the fome which was appeared on to upper side of the dilution. The same experiment repeat in triplicate.

H. For the Determination of Cloud Point

Firstly prepare the desire solution of different concentration than transfer it into 100 ml of beaker and heat it on hot plate, regular watch the dilution when ever cloud formation is appear in the dilution at that temperature noted down.. The same experiment repeat in triplicate.

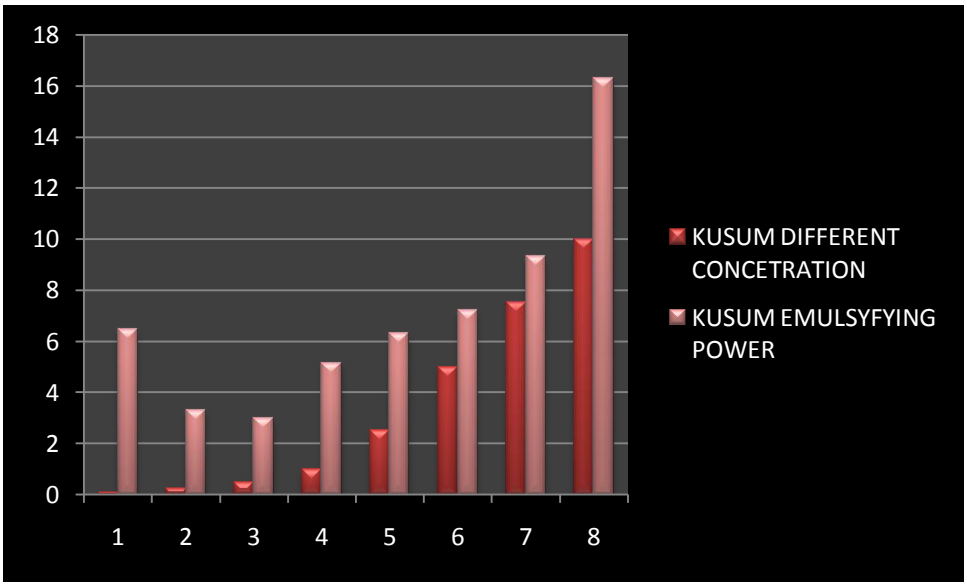
Prepration of Amide

Taken 15 ml of diethynelamine, heat it with 190ºC for 30 min, whenever teken materials cooldown to180 ºC than add 10 gm of extracted protein,and also add some bumping chips,this are all under gone into refluxing unit. After adding thease materials run this unit for 30 min at180 ºC.

3. RESULTS AND DISCUSSION

Prepare the solution of KUSUM AMIDE different concentration 0.1-10% than mix it with liquid paraffin wax 10 ml shake it with 10 times and leave it for till saperate the layer simultaneously note down the time to spend into the layer separation, repeat the same experiment in triplicate.

KUSUM AMIDE EMULSYFYING POWER MINUTES				
DIFFERENT CONCETRATION	**R1**	**R2**	**R3**	**Mean**
0.1	6.30	7.00	6.45	6.45±0.36
0.25	3.00	3.30	4.00	3.3±0.51
0.5	2.45	3.15	3.00	3±0.36
1	5.15	5.30	5.05	5.15±0.12
2.5	6.30	6.45	6.15	6.3±0.15
5	7.10	7.20	7.30	7.2±0.10
7.5	9.20	9.30	9.40	9.3±0.10
10	16.45	16.30	16.15	16.3±0.15



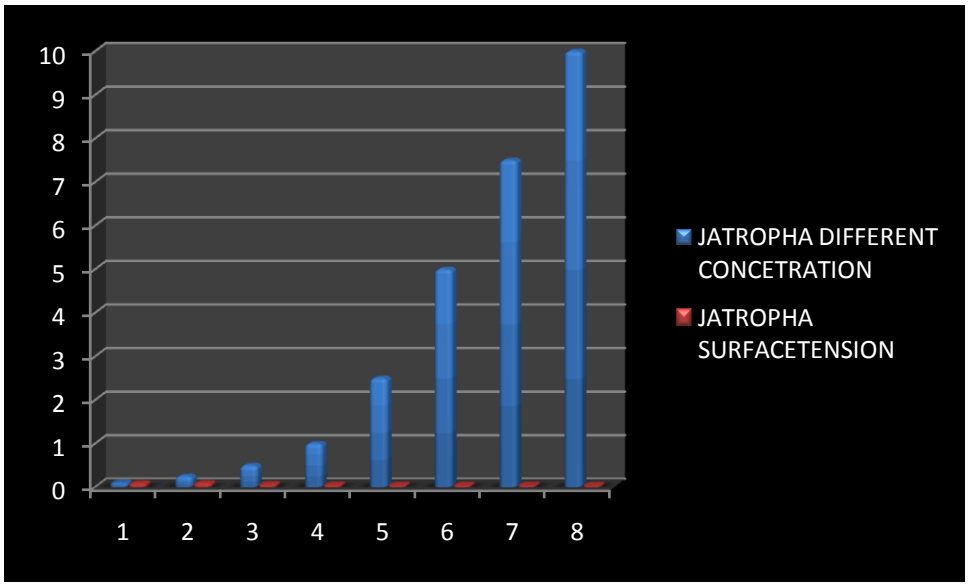
KUSUM AMIDE EMULSYFYING POWER MINUTES varied from different dilution 0.1-10% is 6.45 to 16.3

Maximum- value in 10%-16.3

Minimum value in0.5%-3

Prepare the solution of KUSUM AMIDE different concentration 0.1-10% than measure the weight of 20 drops, before that take the weight of blank gravity bottle finally calculate the surface tension by formula.

KUSUM AMIDE	
DIFFERENT CONCETRATION	**SURFACETENSION**
0.1	0.09425
0.25	0.129
0.5	0.108481
1	0.13626
2.5	0.08375
5	0.0753
7.5	0.07504
10	0.06915



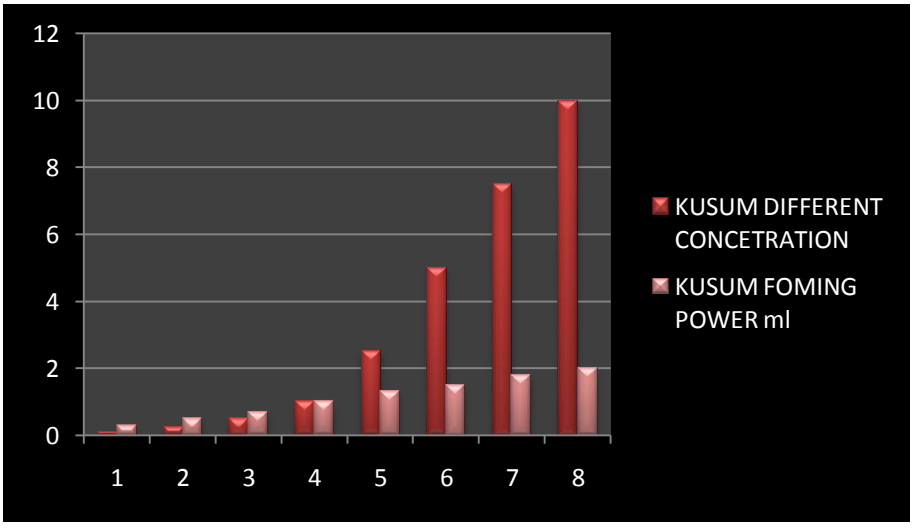
KUSUM AMIDE SURFACETENSION varied from different dilution 0.1-10% is 0.094to 0.069

Maximum- value in0 .25%-0.129

Minimum value in10%-0.069

The solution of KUSUM AMIDE different concentration 0.1-10% than transfer it into 50 ml of measuring cylinder and shake it 10 time and note down the fome which was appeared on to upper side of the dilution. The same experiment repeat in triplicate.

KUSUM AMIDE FOAMING POWER (ml)					
DIFFERENT CONCETRATION	**Initial QTY ml**	**R1**	**R2**	**R3**	**Mean**
0.1	5	5.4	5.3	5.2	5.3±0.10
0.25	5	5.4	5.5	5.6	5.5±0.10
0.5	5	5.6	5.8	5.7	5.7±0.10
1	5	5.9	6.1	6	6±0.10
2.5	5	6.4	6.3	6.2	6.3±0.10
5	5	6.4	6.5	6.6	6.5±0.10
7.5	5	6.7	6.8	6.9	6.8±0.10
10	5	6.9	7	7.1	7.0±0.10



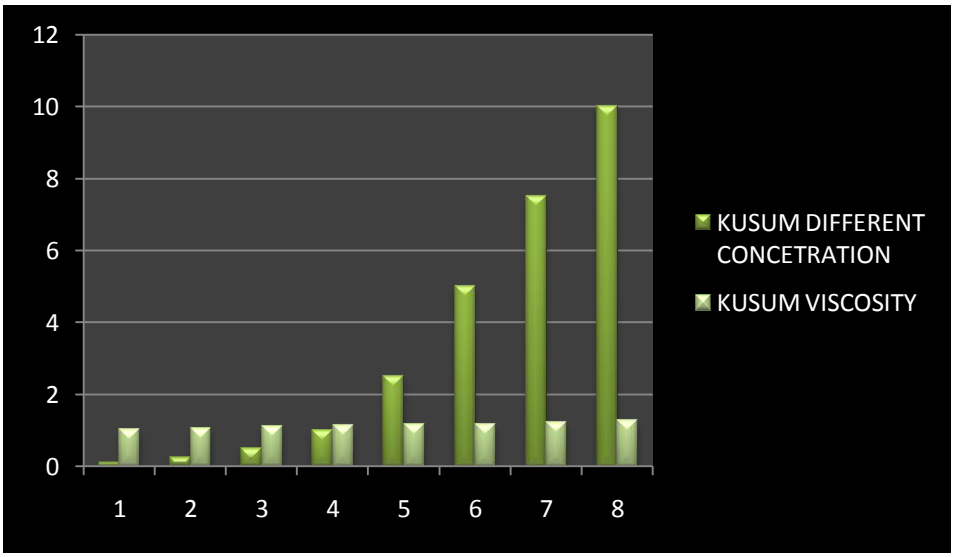
KUSUM AMIDE FOAMING POWER varied from different dilution 0.1-10% is 5.3to 7.0

Maximum- value in10%-7.0

Minimum value in0.1%-5.3

The solution of KUSUM AMIDE different concentration 0.1-10% than measure it under viscometer in triplicate.

KUSUM AMIDE VISCOSITY				
DIFFERENT CONCETRATION	**R1**	**R2**	**R3**	**Mean**
0.1	1.04	1.03	1.02	1.03±0.01
0.25	1.05	1.06	1.04	1.05±0.01
0.5	1.13	1.12	1.11	1.12±0.01
1	1.13	1.14	1.15	1.14±0.01
2.5	1.17	1.18	1.16	1.17±0.01
5	1.19	1.19	1.19	1.19±0
7.5	1.23	1.24	1.25	1.24±0.01
10	1.31	1.29	1.30	1.29±0.01



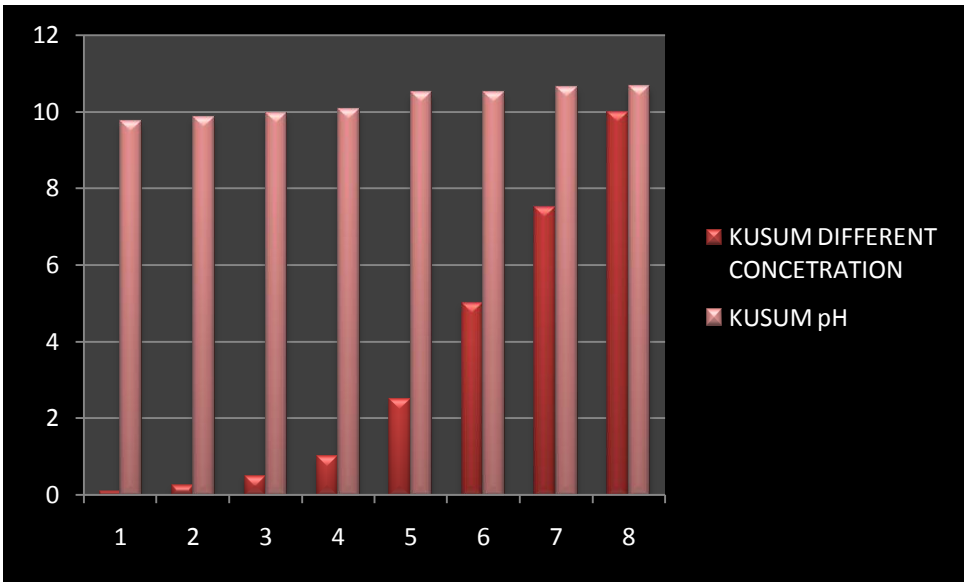
KUSUM AMIDE VISCOSITY varied from different dilution 0.1-10% is 1.03to 1.29

Maximum- value in10%-1.29

Minimum value in0.1%-1.03

Prepare the solution of KUSUM AMIDE different concentration 0.1-10% than measure it under pH miter in triplicate.

KUSUM AMIDE pH				
DIFFERENT CONCETRATION	**R1**	**R2**	**R3**	**Mean**
0.1	9.74	9.73	9.72	9.73±0.01
0.25	9.84	9.85	9.86	9.85±0.01
0.5	9.97	9.96	9.95	9.96±0.01
1	10.06	10.08	10.07	10.07±0.01
2.5	10.48	10.49	10.50	10.49±0.01
5	10.50	10.50	10.51	10.5±0.00
7.5	10.63	10.64	10.65	10.64±0.01
10	10.67	10.68	10.67	10.67±0.00



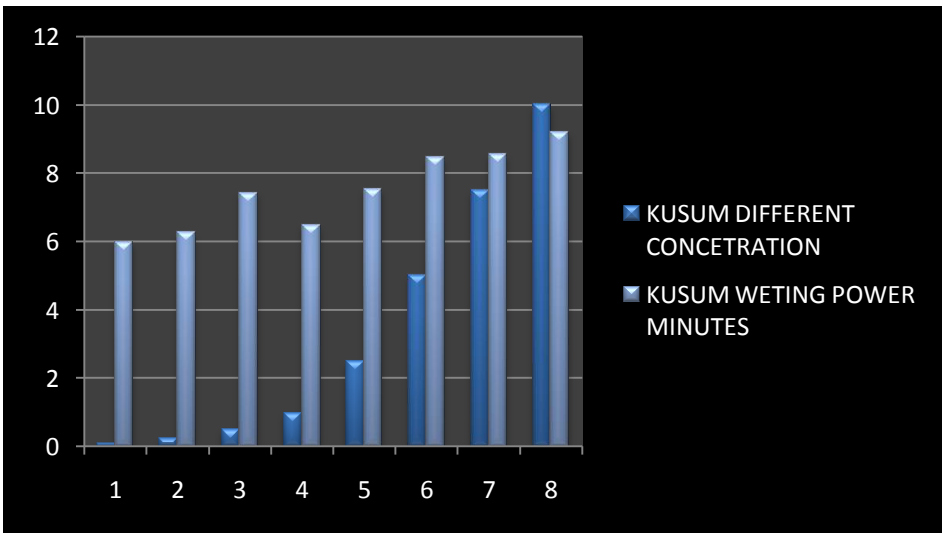
KUSUM AMIDE pH varied from different dilution 0.1-10% is 9.73to 10.67

Maximum- value in10%-10.67

Minimum value in0.1%-9.73

Prepare the solution of KUSUM AMIDE different concentration 0.1-10% than prepare the equal weight of misline cloth and leave it into upper side of the different solution, notedown the time taking to complete wetting of misline cloth. The same experiment repeat in triplicate.

KUSUM AMIDE WETING POWER (MINUTES)				
DIFFERENT CONCETRATION	**R1**	**R2**	**R3**	**Mean**
0.1	6.10	5.50	6.00	6±0.32
0.25	6.30	5.40	6.40	6.27±0.55
0.5	7.50	6.10	8.20	7.44±1.06
1	6.50	7.10	5.20	6.48±0.97
2.5	7.10	7.50	7.40	7.55±0.20
5	8.15	8.40	8.30	8.47±0.12
7.5	8.55	8.45	9.05	8.55±0.32
10	9.10	9.20	9.30	9.20±0.1



KUSUM AMIDE WETING POWER varied from different dilution 0.1-10% is 6 to 9.20

Maximum- value in10%-9.20

Minimum value in0.1%-6

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