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PREPARATION AND STANDARDIZATION OF AMLA LEHYAM

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ABSTRACT

Amla lehyam is an important ayurvedic formulation containing in Embilica officinalis as a main ingredient .The present study was under taken to prepare and standardize amla lehyam containg Bharanghii,canrastram,masikai,pushkaramoolu,dryginger,pippali, talisapatri, pure ghee honey and jaggery. Standardization of amla lehyam included determination of moisture, ash, protein, crude fat, and fiber.The minerals like calcium, sodium, lead, arsenic, mercury are estimated by using atomic absorption spectroscopy. Amla is rich source of Vitamin C.

Keywords: *Embilica officinalis*, Vitamin C, Anti-oxidants, Standardization

INTRODUCTION:

Ayurveda is an ancient Indian medical system dating back to the vedic period of the percent out 3000-1500BC.The word ayurveda is derived from the word ayur means life and veda means knowledge..Embilica officinalis is a classicial ayurvedic poly herbal formulation included in ayurvedic formulary of India. Lehya is one of the several groups of ayurveda formulation .It is arises from sanskirit word .It is the form of medicine which can be tasted with the help of the tongue .It is the semi solid preparation of drugs, prepared by the addition of jaggery, sugar and boiling with prescribed drug juice or decoction. The most important medicinal plant mentioned in various Indian system of medicine (Ayurveda ,siddha, unani)

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The Amla power improves immunity and gives physical strength .Amla is also used to treat constipation and is also used as a cooling agent. Amla is used in lehyam, sauces, pickles.

PREPARATION OF AMLA LEHYAM

2000ml of water was taken in a large vessel and boiled. Then the powder ingredients (bharanghii, Canrastram, Masikai, Pushkaramoolu, Dry ginger, Pippali, Talisapatri,) were added and warming at low flame . The decoction was filtered and collected. To the above solution jaggery was added until it produces a thick substance. Then add Alma powder slowly by stirring continuously to avoid the formation of lumps. Sufficient quantities of honey and ghee were added. The obtained mass was allowed to cool and stored in a glass container at room temperature and labelled.

STANDARIZATION OF AMLA LEHYAM

The preparation for standardization included ash value, crude fibre, crude protein, crude fat and the minerals like sodium, lead , arsenic, mercury are estimated by using atomic absorption spectroscopy.

ASH CONTENT

Procedure

100g of amla lehyam was weighed in a silica dish. It is placed in the muffle furnace and maintains a temperature at 6000c for 3hrs. Then cool it and weigh the silica dish again with the ash.

Table 2. Formulation of Amla lehyam

Ingredients	Quantity (G)	Percentage (%)
Amla	**1500**	17.93
Bharanghii	**50**	0.59
Pippali	**75**	0.89
Talisapatri	**50**	0.59
Pushkaramoolu	**50**	0.59
Masikai	**50**	0.59
Dry ginger	**40**	0.47
Honey	**1500**	17.93
Ghee	**1000**	11.95
Jaggery	**4000**	47.81
Canrastrum	**50**	0.59
Total	**8365**	100

Formula:

Ash content= Mash/Mdry×100

CRUDE FIBRE

Procedure

5g of amla lehyam was weighed and add 200ml of sulphuric acid solution in a round bottomed flask and boil for 30min then it was cooled and i filtred .The obtained residue was heated with 200ml of NaOH for 30mins . Then the residue was washed with boiling water and petroleum ether for three times. Then it is dried by using hot air oven at a temperature of 1050c for 12hrs and the dried sample was placed in a maffle furnace for 3hrs at 6000c.Then it was cooled and weighed.

Formula

Crude fibre (%)=100 A-B/C

CRUDE PROTEIN

Procedure

5g of amla lehyam was weighed and add 10g of potassium sulphate, 0.7g of mercuric oxide and 200ml of sulphuric acid.Then the substances were boiled for 30min and cooled. Then add 90ml of deionized water and 25ml of sodium sulphate with continuous stirring and again add 80ml of 40% NaOH solution.Then connect the flask to the distillation unit.

Formula

Nitrogen in sample (%)100[A×B/C 0.0014]

Crude protein (%) nitrogen in sample ×6.25

Table 3. Results of atomic absorption spectroscopy

Calcium	3.17%
Sodium	7.74%
Lead	20-23ppm
Arsenic	2.0ppm
Mercury	2.1ppm

CRUDE FAT

Procedure

10g of amla lehyam was weighed and placed it in fat extraction flask and to it add 1.5ml of ammonium hydroxide by shaking vigorously.Then add 10ml of 95% ethanol, 25ml of ethyl ether,25ml of petroleum ether and shake for 90sec.Then it is placed in centrifuge for 30sec at 600rpm.The upper layer was removed and the remaining substances were taken and it was kept in hot air oven at 1000c,then cool and weighed.

Formula

Crude fat=W2-W1/W3×100

Table 1. Physicochemical parameters of Amla lehyam

Ingredients	Ash(%)	Crudefat(%)	Crude fibre (%)	Crude protein(%)
Amla	**2**	**-**	**-**	**-**
Bharanghii	**2.6**	**-**	**-**	**-**
Canrastrum	**21**	**-**	**-**	**-**
Pushkaramoolu	**5**	**-**	**-**	**-**
Pippali	**1**	**-**	**-**	**-**
Talisapatri	**4.3**	**-**	**-**	**-**
Masikai	**7**	**-**	**-**	**-**
Dry ginger	**6**	**-**	**-**	**-**
Jaggery	**0.3**	**-**	**-**	**-**
Amla lehyam	**3.6**	**10.81**	**16.6**	**10.81**

CONCLUSION:

Amla is one of the richest sources of vitamin C. Amla lehyam was prepared as per standard procedure mentioned in Ayurveda books. This standardization included determination of ash value, crude fiber, crude protein and crude fat. Further the ash produce from Amla lehyam contained calcium-3.17%, sodium-7.74%, Lead-20.23ppm, Arsenic and mercury 2.0 ppm and 2.1ppm which is in the limits as per IP. Hence it is safe.

REFERENCES:

1. Saraswati C, 1988 Research on age of Vedas.vol 16-20.
2. Chopra,SL.and J.S.Kanwar ,1991.In Analytic agriculture chemistry,kalyani publication Delhi4:297-298
3. Mazumadar,B.C. and K.Majumder,2003.Method on physic-chemical Analysis of fruits 108-109
4. Shumailia Gul Proximate compostion and mineral analysis of cinnamon and Mahpara Safdar Pakistan journal of nutrition8(9):1456-1460,2009.
5. James CS (1995)Analytic chemistry of food.Seale –Hayne faculty of agriculture.

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