

Formulation and Evaluation of Loose Powder from *Musa-Accuminata* an Herbaceous Plant

Shivam A. Punde¹, Aishwarya D.Ghughe², Dr. Swati P. Deshmukh³

¹Shraddha institute of pharmacy kondalazambre, Washim 444505

²Department of Pharmaceutics, Shraddha institute of pharmacy kondalazambre, Washim .444505

³Department of pharmacology, Shraddha institute of pharmacy kondalazambre, Washim 444505

Abstract

(Banana ant antique fruit Crop of the word known as “Apple of paradise” bedayPlay a vital role in Skin treatment.)Banana is a of fruits, nutritions gold mine A Different types. •, such asegetables, organic Compounds are exhorted on through plant & animals. Banana is one of the that use for Treatment of skin, blackspot on the skin, smoothing of the skin, Anti-wonable& Anti-Agening. At all crents, the proper use of the powden helps. Blaminishing the skin. Expecially The face. The compact powder made up of banana give the skin a natummal look &Texture.The banana is NC4 Kaolin, magnesium steauale which aut as a covering agent. The compact Powder of banana is my inext non-toxic, non-irritating & there helps in treating the skin diso The Compact powder of pectus involves wet pacation of dry method to Damp Method. The Powder method evaluated by various parameters. Thus, it is novel herbal approach to tread The aging factor. This formulation extracted from peak extead of banana will be emerging Formatomedicalher factor treating the anti aging.

Keywords: Bleminishing, non-irritant, Kaolin Anti- Aging

Introduction

Banana is a plant (fruit) that Grows in tropical regions and is termed as soft, Sweet, crusty, And Sweet-chipped. It is rich in sugar And nutritious; it contains 70% water. Significant Amounts of Carbohydrates, and a small amount of Protein. The leaves are large and The Length is about 3 Meters; the width is 60 cm. The original name of the banana is *Musa*, Coming From the Musaceaefamily.Green or raw bananas are unripe bananas both green and yellow bananas are the Powerhouses of nutrients we can find this tasty crop in every fruit basket globally.Banana Is one famous fruit we can see in every gracery store and fruit stall in India we can many Dishes of raw bananas.They have a firmer texture and strachy ,middle astringent taste Compare to their ripe counteparts.Bananas are a type of fruit that are widely consumed all over the world. They are among the most important food crops on the planet. They are grown in tropical regions and come in a variety of sizes and colors, ranging from small red bananas to large yellow ones. Cavendish banana is the most commonly consumed and most grown variety in the Philippines, which is a medium-sized, yellow fruit with slightly curved shape.Banana is one of the most widely consumed fruits and is grown across various countries. The majority of the bananas produced worldwide are consumed directly, while a small part is processed into banana powder, which helps in expanding its shelf-life. Banana powder is mainly used for producing milkshakes, protein powder, baby food, etc.Banana powder has been gathering steam among food and cosmetic industries to diversify their portfolio. The consumption potential in the banana powder market has attracted beauty enthusiasts who are looking to utilize the products as setting powder for meeting a wide range of beauty care needs populations.

Fig 1: Banana fruit

Banana climate: Banana is well-suited for cultivation from humid subtropical to semi-arid Subtropics up to 2,000m above mean sea level. In India, it is successfully grown from 8° N to 28° N latitudes With a temperature of 15°-35° C and a rainfall of 500-2,000mm per year. It can be Cultivated in A temperature range of 10°C and 40°C with high humidity but growth is retarded at Temperatures of 20°C and less and more than 35°C. The major effects of unfavourable weather Conditions are the breakage or uprooting of pseudostem by strom and cyclones, reduction in Plant Growth and malformation of bunches due to low temperature etc. Forst is a limiting Factors for successful cultivation of banana.

Mean Annual Temperature:

26-28°C (79-82°F) is optimum for shooting (vegetative growth of banana). 29-30°C (84-86°F) is optimum for fruiting Mean maximum temperature of hottest month 35-37°C (95-99°F) Mean minimum temperature of coldest month 2-30°C (28-86°F) Minimum temperature tolerated The minimum temperature tolerated depends upon the species. At 16°C (60°F) banana plant growth slows, at 10°C (50°F), growth stops.

Soil Requirement: Banana can be grown in almost all types of soil provided adequate soil moisture is Available, deep (minimum-60cm), well drained, frauble, loamy soil with adequate organic matter Is ideal for its cultivation. Alluvial and Volcanic soils are the best for banana cultivation (Durmanov, 1974). In sandy loam sol plants grow faster compared to vertisols or clay loam sol. It Can abo be taken in slightly alkaline soils and such soil reduces wilt disease which is reported to Be in acidic soils. Though soil pH of 6.5-7.5 is optimum, banana can be grown in soils having a pH up to 8.5 with suitable amendments. More organic amendments are essential in sandy as well as heavy soils. Commercial crops of banana in Indu are being raised in the heavy clay soil of the Causeri delta and over large tracts of the Gangetic delta in alluvial soils. Extensive sandy tracts Of the area and large areas of blackkam in Maharashtra are also famous for growing good crops Of banana. The coastal sandy loams as well as red lateritic sous of the hilly tracts of Kerala ako Yield good crop.

Advantages:

1. Loose powder is the key to achieving a flawless, long-lasting makeup look.

2. Not only does it help set your makeup, but it also gives your skin a smooth, matte finish. If you're new to using loose powder, don't worry – it's easy to apply! Simply use a large Powder brush to dust the powder over your entire face
3. Loose powder to set your foundation and control shine.

Disadvantages:

1. Reduce the production of natural oils in the skin (essential oils buying guide).
2. This, in turn, would make the skin dry and could lead to problems like flaky skin and More sensitive skin altogether.
3. Loose powder can be more difficult to use due to its consistency, which can lead to Product spillage.
4. This can be problematic, especially when traveling or storing in a makeup bag.

Aim & Objective:

Aim: To Formulate and evaluate the loose powder from Musa Acuminata, Banana powder.

Objectives:

1. Loose powder is finely milled powder that's used to set makeup.
2. Loose powder absorb excess moisture and gets rid of shine.

The primary purpose loose is to mottify the skin to a certain degree.

To set any makeup look in place skin to create a soft focus, flawless finish.

This powder is very recommended. To Cover Blemishes, dark Spot with durable results.

Plan of work :

Collection of Banana:

1. Chopping: Chop both ends of the banana peel the skin.
2. Sliding: Use a slicer Slice them into theme strips. the thinner they are, faster they'll dry out.
3. Spreading: Spread out the slices on a sheet and dry them in the sun till crisp (it may take at Least 2 to 3 days, Depending upon the climate in your region)
4. Once completely dry, grind to a powder. Sieve to get rid of the coarse particles so you're left With a fine powder. Store in an airtight container.

Materials and methods of powder :

Collection of banana: Unripe, half ripe and fully ripe bananas of (Cavendish Spp.) as well as Fresh lemon fruits were Purchased from the local market- Shambat, Had been used in this Study.[10] Experimental procedure: Banana fruits were Sorted from injured and deteriorated fruits. Then were Washed under running tap water and Weighed. The Cleaned Fruits Were peeled and cut into 1 mm. Slices Thickness using sharp clean Stainless steel knives. A lemon Juice solution of 2.5% Concentration was prepared. The slices Were immediately dipped in the lemon solution For 3 Minutes. Processing of banana powder: The Treated banana slices were spread on perforated stainless Steetrays Cm wide, 75 cm long and About 7 cm height) manually. Two kgs of banana slices were Loaded on a perforated stainless Steel trays and left to dry under shade with the aid of fans for four Days. The dried banana slices Were collected, reweighed And ground using household grinder and Stored at 25-27°C in sealed Plastic bags prior to further analysis. Then the overall

drying ratio, Drying ratio and the peeling Loss were calculated as follows: Overall drying ratio = raw material: dry product weight

Drying ratio = prepared material: dry material.

Peeling loss (%) = weight of peels \times 100/weight of raw material

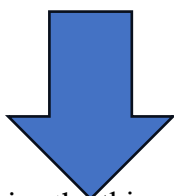
Composition/ Formula:

Sr.No Ingredients Quantity taken (g)

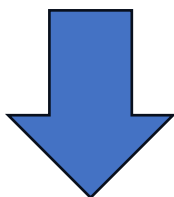
Sr.no.	Ingredients	Qunatity taken
1.	Fragment Talc.	3gm
2.	Kaolin	3gm
3.	Titanium dioxide	2gm
4.	Zinc oxide	2gm
5.	Magnesium Sulphate	2gm
6.	Starch Maize	1gm
7.	Banana powder	2gm
8.	Glycerin	q.s
9.	Perfume	q.s

METHOD OF PREPARATION:

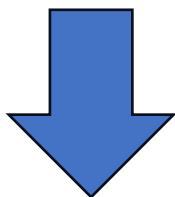
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2.Use a slicerSlize them into theme strips.the thinner they are, faster they'll dry out.



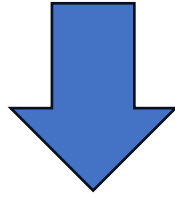
3. Spread out the slices on a sheet and dry them in the sun till crisp (it may take at least 2 to 3 Days, Depending upon the climate in your region)



4.Once completely dry, grind to a powder. Sieve to get rid of the coarse particles so you're left With a fine powder. Store in an airtight container.

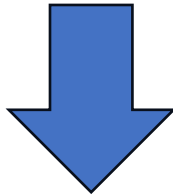
1] Wet Method :-

The basic material, color and binders are formulated in the form of paste with the Help of water. Then the pastes are pressed into moulds and slowly the products are dried by air. Take a clean and dried mortar and pestle

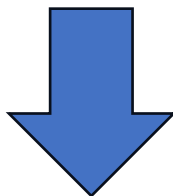


Add kaolin, talc, maize starch. Zinc oxide to the mortar and pestle and triturate.

To this mixture add required quantity of glycerine and water and continue the Trituration.



To the above mixture add sufficient quantity of perfume, coloring agent and Preservative Then properly mix all the above ingredients.



Dried the above mixture temperature at 100c (hot air oven)

Evaluation Parameter of Loose Powder:

- Shade test
- Colour dispersion test
- Pressure test
- Breakage test
- Flow property (an)

1.Shade Test:

In this test, the variations of colour shade is determined and controlled. It is carried out By Spreading the powder sample on a white paper and appearance is observed which is Compared with The standard one. Another method involves, applying powder sample and Standard one with the Help of puff on the skin and then comparing it. The puff used to perform This test is also used for The final product. Evaluation of colour is carried out by using artificial Light.

Fig 2 shade test



3. Colour dispersion test:

In this test, a sample of powder is spread on a white paper and with the help of magnifying glass., Segregation or bleeding of the colour is observed. The colour should be properly distribution tested in the Powder base of the formulation.



1. Pressure Test:

For compaction purpose in compact powders, pressure required. Uniform pressure Should be Applied to avoid formation of air pockets, which will lead to either breaking or Cracking of compact Powders. This is because low pressure will make the compact powder soft, Whereas high pressure Will lead to formation of

hard cake. With the help of penetrometer, Uniformity of hardness of the cake is checked. This is done by Taking the reading at different Points on compact powder and then comparing them.



5. Breakage Test:

In this test, compact powders are allowed to fall on a wooden surface from a height of about 8-10 Inches. This is carried out several times and then checking is done to see whether any breakage Has occurred on compact powder. If the compact powder remains unbroken, then it shows the Resistance to travel and normal handling by the users.



6. Flow Property Test:

This test is carried out mainly on body powders to determine their flow property (from The Container upon usage). This test helps in easy application of powder to skin. In this method, Angle of repose of powder is measured by allowing the powder product to fall on a plate through A funnel. Then the height and the radius of heap formed is measured, and even the time taken for The powder to fall is not

1. Angle of repose :

Angle of repose is the Maximum possible Angle between surface of pile of powder horizontal Plane.it is determined by formula as given:

2. Bulk Density:

The bulk density of a powder is the ratio of the mass of an untapped powder sample and its volume including the contribution of the interparticulate void volume:

Formula: Bulk density = Weight of Powder

Bulk Volume of Powder

3.Tapped density:

The tapped density is an increased bulk density attained after mechanically tapping a container containing the powder sample.

Formula: Tapped Density = Mass of Powder

Tapped Volume

Conclusion:

As loose powder is made from the natural herb that is banana powder it will give the potential of anti-aging and anti oxidants activity And thus will be use as the natural cosmeceuticals. The Loose powder was prepared keeping in mind that it suits all Skin type as the formulation was kept Mild.Loose powder is a cosmetic product used to provide A special touch on the skin, to control Oil and combat shines, or, in addition to provide a matt Finishing effect on the skin. The loose Powder prepared such that they were fit for daily use. Various tests were conducted to prove the Efficiency and stability of product. It did not produce harshness and skin Irritation. Powder: The compact powder was prepared keeping in mind that it suits all Skin type as the Formulation was kept mild. Compact powder is a cosmetic product used to provide A special Touch on the skin, to control oil and combat shines, or, in addition to provide a matt Finishing Effect on the skin. It comes package either as compact or loose powder. Oil based Foundation Products have become increasing popular in cosmetic consumer market. The compact Powder Prepared such that they were fit for daily use. Various tests were conducted to prove the Efficiency and stability ofproduct. The goal of the study was to develop an efficient compact Powder that may be used on a daily basis by people of all ages. The compact powder can be Applied To skin and found to be very effective.From this study we can concluded that Oil based Compact Powder shows better Evaluation parameters and this formulation Containing in terms Of Appearance, color, spread ability and smoothness property. It did not produce harshness and Skin Irritation.

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