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Research Article

**FORMULATION AND EVALUATION OF MILLET SORGHUM
SMOOTH POWDER FOR BLOOD CLOTTING AND BLEEDING****Mr. Rajesh Shivaji Pokle¹, Mr. Avinash .G. Wagh².**

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Abstract:

Sorghum smut is the type of soil fungus. smut is one of the main diseases of sorghum. It's fungus, its grow on sorghum seedling mainly affected by fluorescence (ovary). useful for blood clotting and bleeding. The experiment was to determine the effectiveness role on blood clotting and recovery of wound healing. Smut treated by Trichoderma Powder. The cultivation of this crop is challenged by different biotic and abiotic production constraints such as disease, insets pests, and moisture deficiency according to environment. the maturing fungal Fruiting Structures rupture and release the teliospores that infect sees on other plants. Only seedborne spores cause infection. Teliospores adhere to the surface of seeds where they overwinter. The sorghum smut (fungus) grow in monsoon season because the fungus in summer season under dormancy. They meet favorable condition so its again grow.

The dried powder sorghum smut obtained by sorghum plant. Its evaluation mainly on their Morphology, Appearance, PH determination, Solubility Microscopic evaluation. These are mainly soluble in organic solvents but insoluble in water sparingly soluble in alcohol .the smut basic in nature so due to its ancient time its treated by cow's urine spread on crop. The smut powder find out the some anticoagulant character and clotting activating factor.

The pharmaceutical powder are used for a number of properties and aesthetic purposes, including recovery of new and old wound healing, Bleeding, rapidly clotting and any types of Cuts, wound, runny bleeding etc. The fungus powder is not any harm to human health. The general population and society can safely employ these blood stop powder drug.

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INTRODUCTION:

The fungus powder SORGHUM SMOTH based on formulation and evaluation. Its medicinal use in bleeding and recovery of wound healing. Grain smut/Kernel smut / Covered smut / Short smut - Sphacelotheca sorghi Symptoms

The individual grains are replaced by smut sori. The sori are oval or cylindrical and are covered with a tough creamy skin (peridium) which often persists unbroken up to thrashing. Ratoon crops exhibit higher incidence of disease.

Blood clotting, or coagulation, is an important process that prevents excessive bleeding when a blood vessel is injured. Platelets (a type of blood cell) and proteins in your plasma (the liquid part of blood) work together to stop the bleeding by forming a clot over the injury. The smut fungus including blood clotting properties and their chemical factors like blood. Involved in PH, vitamin k and blood clot activating factors like properties eg. Fibrinogen to fibrin activating properties.

MORPHOLOGY:

The dried powder of SORGHUM SMOTH, GRAIN SMOTH.

Fungus name: SORGHUM SMUT.(soil fungi)

Class/ Phylum: Protista, oomycete.

Family: Peronosporaceae.

INFORMATION: GENERAL**Affected by:**

Sorghum smooth attack on plant seedling part during fluorescence's periods, mainly affected ovaries parts used for food and grow rapidly.

Fungi cycle:

The sorghum smooth It's soil fungi That's fungus invades the plant through root system to systemic circulation and the affect the plant ovaries. then fully growed fungi spread through air dust borne conidia and attack on other jawar & maize plant then during summer season its doorman stage in soil.

Treated by: Tricoderma powder.

Medicinal uses: Bleeding and recovery of wound healing including minor cuts, new old wound healing, rapidly blood clotting etc.

REQUIREMENTS: For evaluation test.**1. Apparatus:**

Test tube, test tube stand, Brush, beaker, funnel, weighing balance etc.

2. Chemical:**Organic solvents:**

Phenol, methyl aldehyde ammonia etc.

Acids: Hydrochloric acid, sulphuric acid, nitric acid etc.

Water: cold and hot water.

Powder drug.

Evaluation test:**1. Appearance test.**

Colour of drug: brownish black & black

Odour: odourless

Size: fine size of particles (fungi)

SORGHUM SMOTH.

Taste: Slightly Bitter.

2. PH test:

PH meter, PH paper.

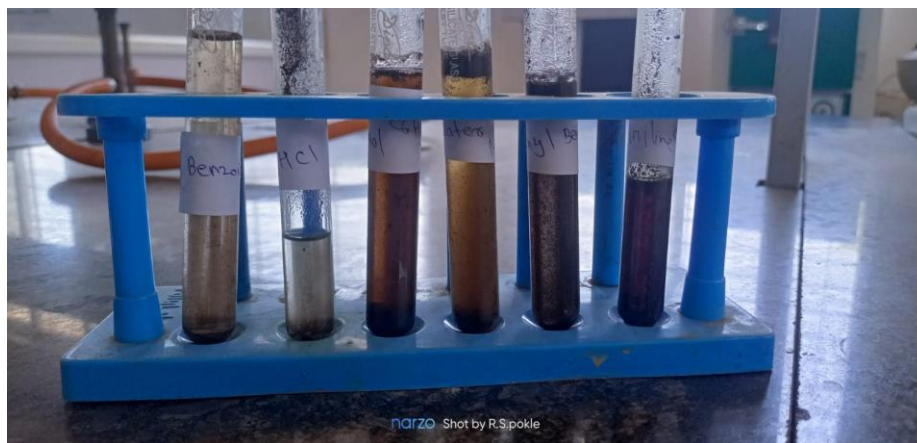
PH Value: 7.4 to 7.9 (Slightly Basic)

3. Solubility Test:

According to IP Solubility ranges.

Sr.no	Solubility	Ranges Solution per gm solvent.
1.	Very soluble	>1
2.	Freely Soluble	1-10
3.	Soluble	10-30
4.	Sparingly soluble	30-100
5.	Slightly soluble	100- 1000

Fig: Solubility test

**Solubility:**

- Soluble: In basic organic solvents.
- In soluble: Water, acids
- Sparingly soluble in alcohol.

Requirement: For formulation:

- Suitable container
- Screening sieve
- Funnel
- Glass rod
- Beaker
- Tripod stand
- Raw powder drug
- Labelling Paper etc.

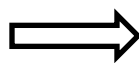
Ingredients: main API fungus powder SORGHUM SMUT.

Preservative: Natamycine

Sr.no	Names of ingredients	Quantity Taken.
1.	Dried powder drug of SORGHUM SMUT	50 gm
2.	Natamycine	0.5 gm (1%)

Treatment Plan:

Firstly before use the powder the bleeding or wound healing affected area wash and clean surely sterile free from microbes. Then affected area spread powder.



Before use of smut powder



After use smut powder

Hypothesis:

The inorganic fungus powder SORGHUM SMOTH That activities the factor XIIth rapidly so, due to Increases the chances of blood clotting ability and creates a rebuts clots to control bleeding and recovery of wound healing.

RESULT: To prepare formulation and evaluation of fungus powder of SORGHUM SMUT are studied and prepared

Irritancy:

Irraintancy test	Result
Irritation	No
Redness	No

Stability:

Stability parameter	Result
Colour	No change
Odour	—
Texture	No change
PH	No change

Physical Test:**CONCLUSION:**

The overall research cocluded that the evaluation and formulation the best results and its provide the anticoagulant property. Hence formulated as a confirmatory evaluation formulation as per requirement. From the result its concluded that that formulated fungus smut powder showed good physical property, irritancy test, good stability. It will help to recovery of wound healing and rapidly blood clotting. it's also improves patients compliance. and my experience about blood clotting fungus smut powder. Other excipients its n't added its fully naturally obtained and only preservative add for maintaince stability. During the research study the smut powder does not any types of harm and irritancy occurs. Hence, based on results and discussion it can be safely used externally on body.

Sr.no.	Parameter	Result
1.	Colour	Black and brownish
2.	Odour	Odourless
3.	Texture	Rough particles of sorghum smut.
4.	Appearance	Solid

REFERENCE:

Entomology study of Fungi and Plant Diseases by B.
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ENTOMOLOGY

Evaluation of insecticidal botanicals against sorghum
covered smut (*Sphacelotheca sorghi*)²

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