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Anil Deka

Assistant Professor, Department of Anatomy & Histology, College of Veterinary Science, Assam Agricultural University, Khanapara, Guwahati, Assam, India

Mansil M Sangma

MVSc Scholar, Department of Anatomy & Histology, College of Veterinary Science, Assam Agricultural University, Khanapara, Guwahati, Assam, India

KB Dev Choudhury

Assistant Professor, Department of Anatomy & Histology, College of Veterinary Science, Assam Agricultural University, Khanapara, Guwahati, Assam, India

J Rajkhowa

Assistant Professor, Department of Anatomy & Histology, College of Veterinary Science, Assam Agricultural University, Khanapara, Guwahati, Assam, India

S Sinha

Assistant Professor, Department of Anatomy & Histology, College of Veterinary Science, Assam Agricultural University, Khanapara, Guwahati, Assam, India

Corresponding Author: Anil Deka

Assistant Professor, Department of Anatomy & Histology, College of Veterinary Science, Assam Agricultural University, Khanapara, Guwahati, Assam, India

Preparation of extract from *Aparajita* flower and application of extract of *Aparajita* as biological stain on fungus grown seed of *Datura* flower

Anil Deka, Mansil M Sangma, KB Dev Choudhury, J Rajkhwa and S Sinha

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Abstract

The colour of the *aparajita* flower is blue. First, we collected the flower, then we kept the flower in mixer and grinder and add boiled water (above 100^C). Then, extract of the flower was produced and add acetic acid. After preparation of extract applied on Fungus grown on seed of *Datura*. The seed of *datura* causes aphrodisiac. The conidia, conidiophores and fungal hyphae took the colour of this biological stain. It can be use against the methylen blue stain. Methylene blue is synthetic stain and costly, where as the extract of *aparajita* is eco-friendly and cost effective.

Keywords: Aparajita, extract, fungus, seed, datura

Introduction

The colour of the *aparajita* flower is blue (Fig.1). Assamese people use these flower in *Satya narayan puja*. The seed of *datura* causes aphrodisiac. The shape of the flower is looks like a shape of the ear of cattle. Since, there is very scanty literature on the preparation of extract from *aparajita* flower and application of extract of *aparajita* as biological stain on Fungus grown in seed of *datura* flower, hence the present study was designee.



Fig 1: Photograph showing the Aprajita flower.

Materials and Methods

First, we collected the flower, then we kept the flower in mixer and grinder and add boiled water (above 100°). Then, extract of the *aparajita* flower was produced and add acetic acid (Fig. 2 & 3). After preparation of extract applied on fungus grown on seed of *datura* (Fig.4).

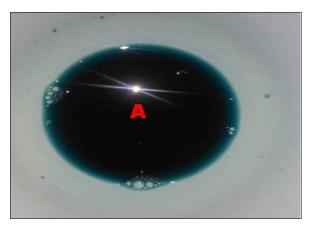


Fig 2: Photograph showing the extract of Aparajita flower (A)

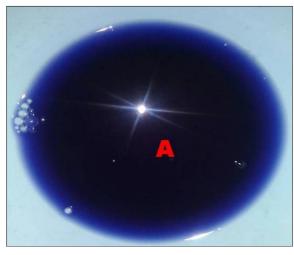


Fig 3: Photograph showing the extract of Aparajita along with acetic acid.



Fig 4: Photograph showing the fungal colonies grown in seed of Datura

Results and Discussions

In current study, the fungal colonies were collected from seed of *Datura* by biological forceps and kept in one clean slide. Then, we pour on 70% alcohol in fungal colonies and kept for few minutes. Then, we pour on extract of *aparajita* on fungal colonies and kept for few minutes (Fig.5). The fungal hyphae, conidia and conidiophores of fungal colonies of *datura* took the colour of *aparjita* flower. Similar finding was reported by Deepali *et al.*, (2014) ^[1]. The conidia, conidiophores and fungal hyphae took the colour of this biological stain (Fig.5 & 6). It can be use against the methylen blue stain. Methylene blue is synthetic stain and costly, where as the extract of *Aparajita* is eco-friendly and cost effective.

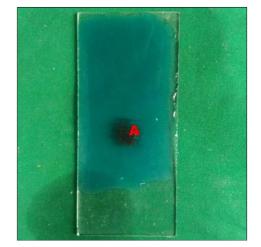


Fig 5: Photograph showing the fungal colonies along with extract of *Aparajita* and 70% alcohol in slide.

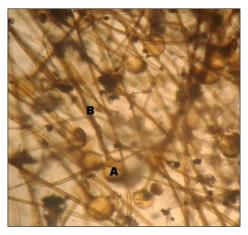


Fig 6: Photomicrograph showing the fungal hyphae (B) and conidea (A) of fungal colonies of *Datura*

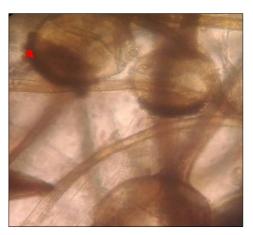


Fig 7: Photograph showing the Conidiophores (A) of fungal colonies.

Summary and Conclusion

The conidia, conidiophores and fungal hyphae took the colour of this biological stain. It can be use against the methylen blue stain. Methylene blue is synthetic stain and costly, where as the extract of *Aparajita* is eco-friendly and cost effective.

References

 Deepali K, Lalita S, Deepaika M. Application of aqueous plant extracts as biological stains. International Journal of Scientific and Engineering Research. 2014; 5(2):1586.