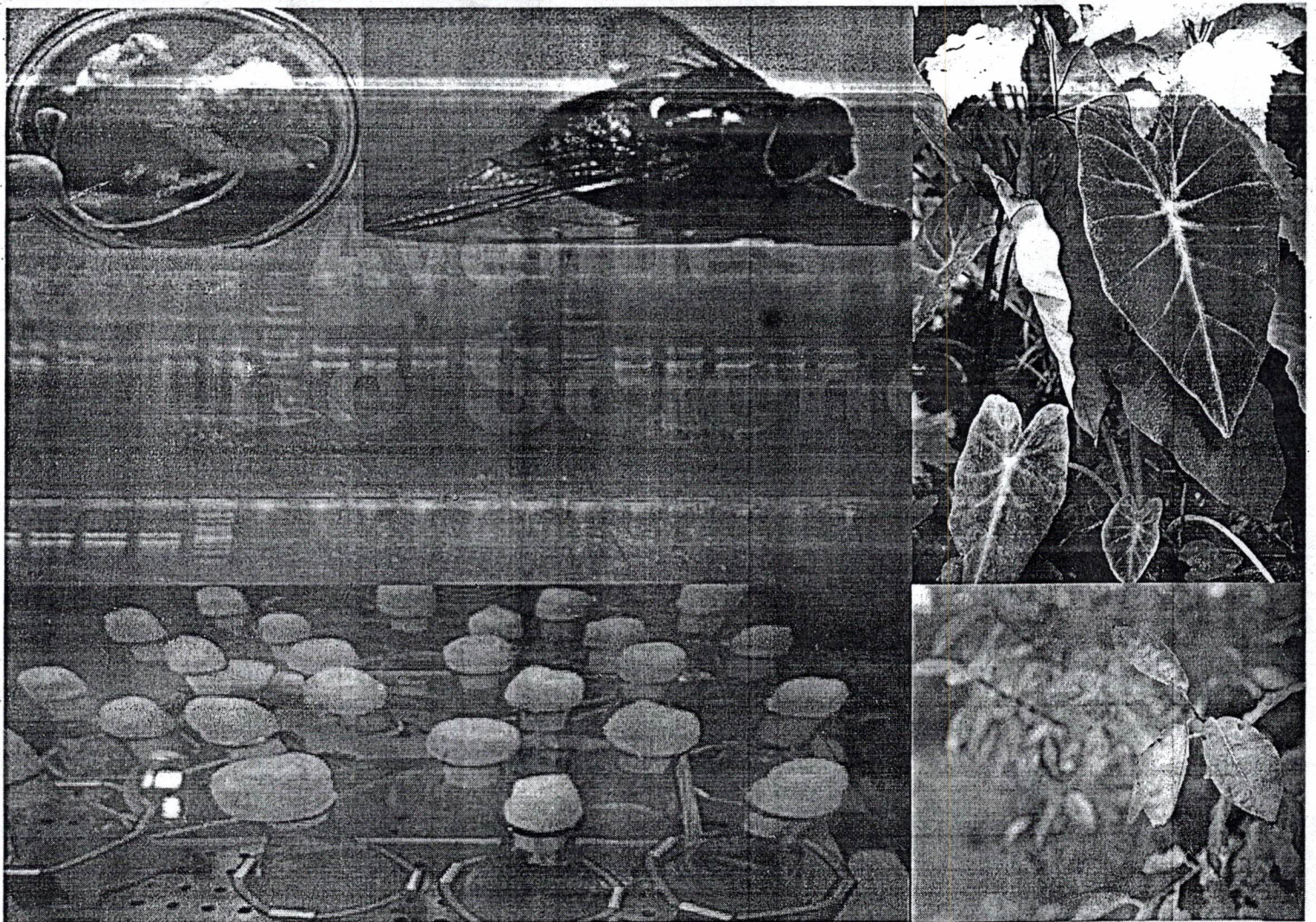


# Avenues in Life Sciences



**Editors**

**Dr. Jalindar S. Ambhore**

**Dr. Ramvilas G. Ladda**

*Chapter in Book*



# Avenues in Life Science

**Dr. Jalindar S. Ambhore**

M.Sc., Ph.D.

**Avenues in Life Science**  
Professor and Head, Department of Botany,  
Indraraj Arts, Commerce & Science College,  
Sillod, Aurangabad. Maharashtra.

**Dr. Ramvilas G Ladda**

M.Sc., M.Phil., Ph.D.

Shree Sant Janabai Education Society's  
Arts, Commerce & Science College.  
Gangakhed, Dist. Parbhani- 431 514.

**Dr. Jalindar S. Ambhore**

M.Sc., Ph.D.

Professor and Head, Department of Botany,  
Indraraj Arts, Commerce & Science College,  
Sillod, Aurangabad. Maharashtra.

**Dr. Ramvilas G Ladda**



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Shree Sant Janabai Education Society's  
Arts, Commerce & Science College.  
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UK

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# To Study in vivo growth of *Macrophomina phaseolina* on root slices of *Rauwolfia serpentina*

M. M. Dudhbhate

Department of Botany, ACS College, Gangakhed Dist., Parbhani (M.S.)

## Abstract

*Macrophomina phaseolina* (Tassi) Goid is a soil borne fungus causes root rot diseases to Sarpagandha (*Rauwolfia serpentina*). The fungus infects the root and lower stem of over 500 plant species and is widely distributed in the United States (Wyllie, 1988). To study in vivo the growth of *Macrophomina phaseolina* on root slice of *Rauwolfia serpentina* by using pure culture of *Macrophomina phaseolina*.

**Key Words** - *Macrophomina phaseolina*, Root Slices, Sarpagandha etc  
*Rauwolfia serpentina*

## Materials and Methods:

M. M. Dudhbhate  
*In vivo* growth of *Macrophomina phaseolina* on slices of root:  
Department of Botany, ACS College, Gangakhed Dist., Parbhani (M.S.)

**Abstract**  
The growth of *Macrophomina phaseolina* was also observed in vivo on slices of root of *Rauwolfia serpentina*. A five mm disc of pure culture of four different fungal pathogen isolates was inoculated aseptically on the root slices of *Rauwolfia serpentina* and incubated at room temperature for 7 days. The growth of pathogen was measured and recorded as shown in table 1 and plate 1. The growth was initiated from first day of incubation period. The growth was measured up to 7 days i.e., from 1 to 7 days as 5 to 16 mm. In vivo on root slices observed there is increase in growth with increase in incubation period. Table.1: In vivo growth of different isolates of *Macrophomina phaseolina* on root slices of *Rauwolfia serpentina*.  
**Key Words** - *Macrophomina phaseolina*, Root Slices, Sarpagandha etc

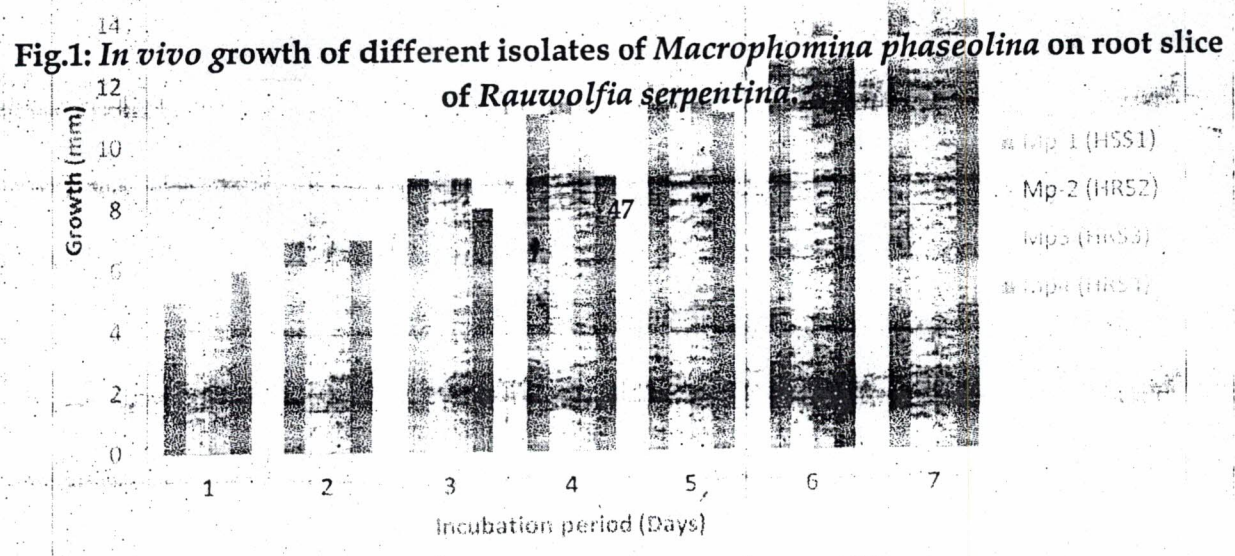
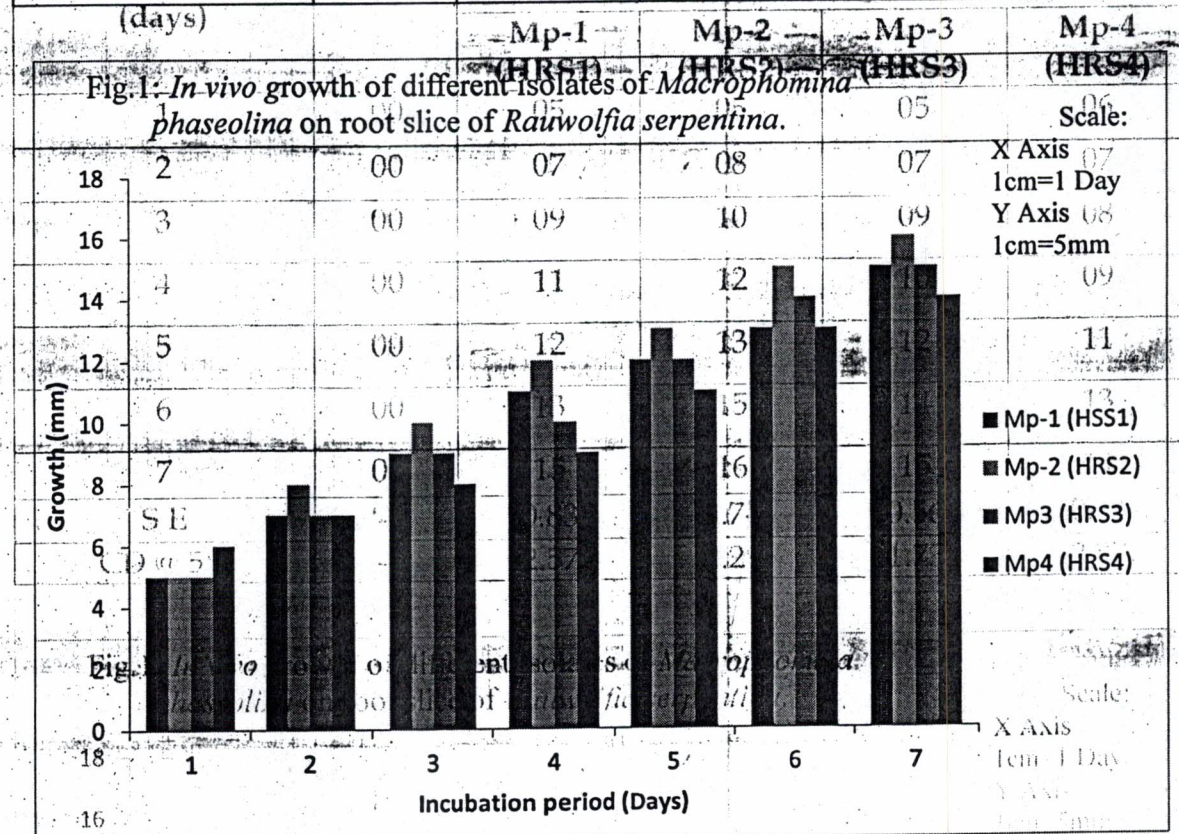
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Incubation period (days)	Control	Growth (mm)			
		Mp-1 (HRS1)	Mp-2 (HRS2)	Mp-3 (HRS3)	Mp-4 (HRS4)
1	00	05	05	05	06
2	00	07	08	07	07
3	00	09	10	09	08
4	00	11	12	10	09
5	00	12	13	12	11
6	00	13	15	14	13
7	00	15	16	15	14
SE	--	0.83	0.74	0.56	0.93
Incubation period (days)	Control	2.57	2.29	1.73	2.87





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