

**Workshop on Agricultural Biotechnology:
Advanced tissue culture techniques for crop improvement**

21-27 February 2007

TERI, New Delhi

AGENDA

Day and Time	Session	Speaker/ demonstrator
21st February		
9.30- 9.45 am	Registration	
9.45 - 10 am	Welcome and introducing TERI	Dr Nutan Kaushik
10 - 10.15 am	Short TERI film	
10.15- 10.30am	Introduction of participants & vote of thanks	Dr Abha Agnihotri
10.30 - 11am	Tea	
11am- 12 noon	Introduction to advanced tissue culture techniques; application of <i>in vitro</i> embryo rescue for realization of incompatible hybrids	Dr Abha Agnihotri
12- 1pm	Review of haploid research and anther culture/ microspore culture technique in oilseed <i>Brassica</i>	Dr Deepak Prem
1- 2pm	Lunch	
2 to 3.30 pm	Requirements for anther/ microspore culture	Mr Chandan Khemani
3.30- 3.45 pm	Tea	
3.45- 5.15 pm	Requirements for ovary/ ovule culture/ embryo rescue	Mr Gautam Sarkar
22nd February		
9.30- 11am	Visit to labs/ facilities Pre- preparations for aseptic cultures/ stocks for media preparation	Dr Deepak Prem Mr Gautam Sarkar
11- 11.30 am	Tea break	
11.30 am – 1pm	Demonstration/ hands on training; media preparation for anther/ ovary/ ovule culture/ embryo rescue (Group 1) and microspore culture (Group 2)	Dr Deepak Prem Mr Gautam Sarkar
1.00-2.00 p.m.	Lunch	
2.00- 3.30 pm	Demonstration/ hands on training; media preparation for anther/ ovary/ ovule culture/ embryo rescue (Group 2) and microspore	Dr Deepak Prem Mr Gautam Sarkar

Day and Time	Session	Speaker/ demonstrator
	culture (Group 1)	
3.30- 3.45 pm	Tea break	
3.45- 5.15 pm	Questions/ queries/ discussions	
23rd February		
9.30am - 1pm	Demonstration/ hands on training for ovary/ anther culture techniques (Group 1) and bud selection, isolation of microspores, microspore washing, cell count and final plating (group 2)	Dr Deepak Prem Mr Gautam Sarkar
2- 5 pm	Demonstration/ hands on training for ovary/ anther culture techniques (Group 2) and bud selection, isolation of microspores, microspore washing, cell count and final plating (group 1)	Dr Deepak Prem Mr Gautam Sarkar
11- 11.30 am	Tea break	
1 pm – 2 pm	Lunch break	
3.30- 3.45 pm	Tea break	
24th Feb		
9.30am – 1pm	Demonstration/ hands on training; microspore culture observations, counting dicotyledonary, heart and torpedo shaped embryos (Group 1) Ovary dissection and excised/ direct ovule culture (Group 2)	Dr Deepak Prem Mr Gautam Sarkar
2- 5 pm	Demonstration/ hands on training; microspore culture observations, counting dicotyledonary, heart and torpedo shaped embryos (Group 2) Ovary dissection and excised/ direct ovule culture (Group 1)	Dr Deepak Prem Mr Gautam Sarkar
11- 11.30 am	Tea break	
1 pm- 2 pm	Lunch break	
3.30- 3.45 pm	Tea break	
26th Feb		
9.30 am – 1 pm	Demonstration/ hands on training; observations for embryo germination, subculture of germinated embryos and plantlet development (Group 1) / ovule dissection and sequential embryo rescue (Group 2)	Dr Deepak Prem Mr Gautam Sarkar
2- 5 pm	Demonstration/ hands on training; observations for embryo germination, subculture of germinated embryos and plantlet development (Group 2) / ovule dissection and sequential	Dr Deepak Prem Mr Gautam Sarkar

Day and Time	Session	Speaker/ demonstrator
	embryo rescue (Group 1)	
11- 11.30 am	Tea break	
1 pm- 2	Lunch break	
3.30- 3.45 pm	Tea break	
27th Feb		
9.30 to 10. 30	Demonstration/ hands on training; diploidization of haploid plantlets/ rescued embryo derived plantlets by root dip method and transplantation	Dr Deepak Prem Mr Gautam Sarkar
10.30 am	Departure to Gual Pahari	
11.15 am – 12 noon	Arrival Gual Pahari and tea at Retreat	
12- 1pm	Visit to MTP and <i>Brassica</i> fields	Dr Abha Agnihotri
1- 2 pm	Lunch break	
2 pm	Departure for IHC	
3- 4pm	Arrival IHC and distribution of certificates	Dr Banwari Lal, Director, EIDB
4-4.30pm	Tea	