



*To Sylvie
without whom nothing could be,
to my parents and grandparents.*

Preface

This book is essentially the proceedings of the meeting entitled "Present and Potential Industrial Uses of Parasitic and Symbiotic Plant Microorganisms" held April 14-17, 1986 in Paris at the Assurances Générales de France for the purpose of establishing a first state-of-the-art forum in this domain. This 30th meeting of the Société Française de Phytopathologie brought together about 170 delegates from 17 countries. Forty four of the forty seven papers originally proposed were presented as oral communications or as posters. Four very dynamic round tables were held during two half-days. I wish to sincerely thank the chairmen, round table animators and referees, presented below for their cooperation and competence.

An innovation of this meeting is that the submitted communications were reviewed for publication by two independent referees from two different countries (the mention "reviewed" is printed on such papers).

The success of this meeting was rendered possible as a result of sponsorship by both "classical" channels and by "less classical" channels i.e. private enterprises. The list of sponsors is given below in alphabetical order. Their help is gratefully acknowledged.

The purpose of the meeting was to produce the most exhaustive synthesis of the practical applications offered by phytopathogenic microorganisms as well as to discuss the possible risks arising from industrial uses. Screening and the need for microorganism collections were also discussed and, finally, the present and future needs of industry and legislative aspects such as patents were considered. This theme attracted people from various applied and fundamental domains such as private and state organizations and from departments of phytopathology, agronomy, molecular biology, biotechnology, plant protection and breeding, pharmacy, etc... Since it was the first time that such a theme was developed in a meeting, some imperfections were inevitable and some subjects remain to be explored. Among those we regret, are for example, the absence of communications on milk clotting enzymes produced by *Endothia parasitica*, the industrial production of plant growth regulators, ice nucleation, asparaginase production or vitamin C bioengineered by *Erwinia*

sp., biotransformations or waste utilization by phytopathogens differing from white rot fungi.

However, the most important and rapidly developing topics were presented (plant transformation using Ti and Ri plasmids or Cauliflower Mosaic virus, lignin biodegradation, uses of plant cell wall depolymerising enzymes, biofertilizers or polysaccharides...) along with their practical applications (introduction of the gene encoding for the toxin of *Bacillus thuringiensis*, production of tropane alkaloids or inocula using transformed roots...). Some less known but very exciting domains should retain our attention mainly for the openings they suggest (i.e. satellite tobacco necrosis virus as a vector in plant genetic engineering, plasmids of ectomycorrhizae, production of the inoculum of endomycorrhizae, cloning and effective production of specific pectinases, production of useful compounds by diseased or stressed plants or use in *Escherichia coli* of the secretion system of phytopathogenic enterobacterium...). As a Frenchman I cannot neglect mentioning the communication on the use of mutants of *Botrytis cinerea* for the improvement of Sauterne wine...

The final session — concerned with the problems of screening, microorganism collections, legislative aspects — enabled the participants to become more aware of these aspects and led to many exchanges during the round-table. Such a session is to be recommended in meetings frequented by plant pathologists. Finally the problems encountered during the transition from laboratory to pilot scale were illustrated by different examples. I hope this meeting will be the beginning of a fruitful cooperation between phytopathologists and industry for the use of phytopathogenic microorganisms.

I cannot finish this short introduction without thanking all the people who have helped and encouraged me; most of all my wife Sylvie, Dr. Alain Coleno, head of the Department of Plant Pathology at INRA, as well as the whole team, namely Marie Louise Le Gonidec, Dr. Douglas Rutledge and the personnel of the Assurances Générales de France. Special thanks are to be expressed to the Hotel de Ville de Paris (Paris City Hall) which honoured us with a reception in its splendid lounges.

I know how much the participants in this meeting appreciated finding an occasion to have discussions with people from various fields. To create such opportunities is an important mission of a Society such as ours.

Y. Bertheau
Organizer

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