

Editor's preface

As we move into Volume 3 of *PGR: C&U*, we are confident that the journal has established itself as a significant presence in our area of science. Looking to the year ahead we are convinced that our July issue on medicinal plants will represent a significant contribution to plant genetic resources. Our thanks go to our guest editors, Dr. Umesh C. Lavanaia and Prof. Monique Simmonds and to all the contributors for their efforts in putting this issue together.

The importance of medicinal plants is underlined by the best guess that at least 70% of people worldwide rely heavily on herbal medicine to meet their healthcare needs. The popularity of herbal medicine is also increasing in developed economies, as evidenced by an annual growth in sales over recent years of 10–20% in Europe and North America. Conservatively, the value of the current global trade in medicinal herbs is estimated to be over US\$60 billion, projected to rise by 2050 to US\$5 trillion. Plants have also contributed enormously to conventional pharmaceuticals, either directly in the form of the raw material from which active ingredients are extracted, or, indirectly but more commonly, by providing the chemical leads from which even more effective synthetic derivatives can be designed. For over 100 major pharmaceutical principles of plant origin, there remain no synthetic or alternative remedies.

How many plant species are used medicinally is uncertain, but are thought to number 50,000 worldwide. Over 1500 species are actively traded, but far fewer are purposefully farmed on any scale—in China and India, the major consumers and producers of herbal medicine, only 150–250 species are cultivated. Thus in all, over 80% of consumption is derived from plants grown in the wild. As a result, it is not unlikely that many species are threatened with genetic erosion by a combination of habitat decline and over-harvesting.

The relevance of medicinal plants to both the characterization and utilization of genetic resources is undeniable, and the forthcoming special issue of *PGR: C&U* aims to provide a timely and comprehensive review of the state-of-the-art in the field.

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