

P77

## **Coevolution in the transmission of transcribed ribosomal genes between *Fusarium oxysporum* formae and host plants**

Man Kyu Huh, Kyung-Tae Chung<sup>1</sup> and Yong-Kee Jeong<sup>1</sup>

Department of Molecular Biology, Dong-eui University, Busan

<sup>1</sup>Department of Life Science & Biotechnology, Dong-eui University, Busan

From an analysis of the distributions of measures of transmission rates among hosts, we identify an empirical relationship suggesting that typically 26% of the host species contributes at least 74% of the net transmission potential. The rates applies to a variety of disease systems, including vector-borne parasites and transmitted pathogens. The genetic relationship of forty-one formae speciales of *Fusarium oxysporum* causing plant disease was determined by Random amplified polymorphic DNA (RAPD) markers and sequencing of internal transcribed spacer region (ITS). A high difference of genetic variation was found in *F. oxysporum* and formae speciales, *F. oxysporum* f. sp. *radicus-lycopersici* 2 strains, *F. oxysporum* f. sp. *niveum*. However, there is also some force affecting synonymous sites as well. At this point, it is possible to assume whether it is generation time, speciation rate, mutation rate, DNA transmission or some combination of these factors.