Record Nr. UNINA9910774866103321 XIII Conference "Root and Butt Rot of Forest Trees" IUFRO Working Party **Titolo** 7.02.01: September 4th-10th 2011 Firenze - Auditorium di S. Apollonia S. Martino di Castrozza (TN) - Palazzo Sass Maor, Italy // edited by Paolo Capretti [and four others] Pubbl/distr/stampa Firenze, Italy:,: Firenze University Press,, [2013] ©2013 Descrizione fisica 1 online resource (xxi, 272 pages): illustrations Disciplina 632.3 Soggetti Roots (Botany) - Diseases and pests Root rots Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia SESSION 1 GENOMICS AND PLANT- PATHOGEN INTERACTIONS --Nota di contenuto SESSION 2 SYSTEMATIC, TAXONOMY AND PHYLOGEOGRAPHY --SESSION 3 ECOLOGY -- SESSION 4 POPULATION GENETICS -- SESSION 5 AETIOLOGY AND EPIDEMIOLOGY -- SESSION 6 DISEASE MANAGEMENT AND CONTROL -- SESSION 7 NEW REPORTS, DIAGNOSTICS AND RESEARCH APPLICATIONS OF DIAGNOSTIC METHODS -- Preface. We report on the annotated genome sequence and transcript profiling Sommario/riassunto as well as quantitative trait loci mapping of one member of the Heterobasidion annosum sensu lato species complex; H. irregulare. Quantitative trait loci critical for pathogenicity and rich in transposable elements, orphan and secreted genes, were identified. A wide range of cellulose degrading enzymes is expressed during wood decay. In contrast, pathogenic interaction between H. irregulare and pine engages fewer carbohydrate active enzymes, but involves an increase in pectinolytic enzymes, transcription modules for oxidative stress, and secondary metabolite production. Our results show a trade-off in terms of constrained carbohydrate decomposition and membrane transport

capacity during interaction with living host. The findings establish that saprotrophic wood decay and necrotrophic parasitism involve two