

Dr. Enilson Saccol de Sá Biography

Dr. Enilson has been a professor in the Soil Department of the Federal University of Rio Grande do Sul since September 1992, currently in the position of Full Professor. He has experience in the area of Agronomy, with an emphasis on Microbiology and Soil Biochemistry, mainly working on the following topics: bacterial plant growth promotion and symbiotic nitrogen fixation, selection of rhizobia strains, soil mesofauna and soil microbiology, seed and plant inoculation methods, inoculant formulations and techniques for the evaluation of the survival of bacterial inoculants. He also conducted studies with inoculants produced based on the use of nanofibers, showing that seeds of soybean covered with these novel formulations allows more protection and increased survival of the bacteria.

Dr. Enilson has been researching efficient rhizobia for the symbiotic fixation of nitrogen to maintain high levels of agricultural production in more sustainable ways. He has trained many students and professionals and is committed to the use of beneficial microorganisms in agricultural settings, supervising 19 masters, 10 doctorate and 3 postdoctoral students. He has been developing research on Symbiotic Nitrogen Fixation, Rhizobiology and inoculant production technology since 2004, and also studying growth promoting microorganisms (*Rhizobium*, *Azospirillum*, etc) in non-leguminous plants such as forage grasses (pensacola, millet, sorghum, black oats), vegetables (lettuce, tomato and condiments), cereals (irrigated rice, wheat and corn). He has shown that co-inoculation of rhizobia with *Azospirillum* allows the production of rice, maize and wheat grains with half the amount of fertilizer normally used. These encouraging findings are leading the way towards reduced use of nitrogen fertilizers.