The seminar will cover highlights of a recent yield gap (farmer vs. achievable) analysis for the sunflower crop in Argentina conducted by the Argentine Sunflower Association (ASAGIR). Estimates of farmer yields were obtained from the Agriculture Secretariat data base for the most important reporting districts in the sunflower growing regions; achievable yield estimates were obtained from records of comparative yield trials conducted in each of the eight sunflower-growing regions of the country. For five of these regions, data bases for individual field yields were also compiled. At 0.95 tn/ha, the gap represents 53% of weighted national average farmer yield of 1.81 tn/ha. The exercise provided a reference framework for inter-regional and inter-annual variations in yield gaps, and the results underline the dominant effect of environment (management, soil, weather) in determining yield variability vis-à-vis genotype and genotype x environment effects.

Antonio Hall (Ing. Agr, UBA; Ph.D. Macquarie) is emeritus professor at the Univ. of Buenos Aires, principal research scientist of the national research council of Argentina (CONICET), and member of the Academy of Agricultural and Veterinary Sciences (Argentina). His research interest is crop ecophysiology, and he and his colleagues and students have contributed to improving our understanding of how crops such as sunflower, maize, wheat and quinoa respond to a range of environmental factors. The International Sunflower Association awarded him the Pustovoiit prize in 2008 in recognition of his work on sunflower ecophysiology.