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From Asia to Mediterranean: Soya bean, Spanish legumes and commercial Soya Bean principal component, cluster and meta analyses

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Different types of soya bean, Mediterranean legumes and commercial soya bean are classified by principal component analyses (PCAs) of proximates, amino acids and isoflavones (daidzein, genistein) content, and legumes cluster analyses (CAs), which agree. Samples group into two classes. Compositional PCA and legumes CA allow classification and concur. The first axis explains 65%, the first two, 82%, the first three, 93% variance, *etc.* Legumes according to proximates, *etc.* are different depending on *energy*, lysine, methionine and tryptophan. Macronutrients result separated. Soya bean, originated in China, is now planted all over the world and the study of its cold resistance gained interest. The main group of flavonoids that are well-known to possess oestrogenic activities are the isoflavones, which follows from the earlier recognition that a dietary disease of ewes in Australia was caused by isoflavone constituents of the clover plants present in their pasture. Specific phytoestrogens possess the beneficial properties of oestrogen but are not feminizing. Genistein reproduces the antioxidant effects of oestrogen via a mechanism: oestrogens activate receptors that induce cascades of signals, which ultimately induce the expression of antioxidant genes associated with longevity. It is essential to assess the role of soya bean in human food and health. Without losing sight of its qualities, the current offer of the market is exceeded in the attributes that are conferred to it. Soya bean should neither move nor substitute the consumption of other products habitual in the Mediterranean diet but in any case diversify the offer in the leguminous group.

Biography

Francisco Torrens has completed his PhD at the age of 29 years from Universitat de València and postdoctoral studies from Université de Nancy I. He is the director of the Molecular Simulation and Computer-Aided Drug Design and Development Unit in the Institute for Molecular Science UV, a premier nonprofit university. He has published more than 300 papers in reputed journals, 1600 presentations and has been serving as an editorial board member of repute.

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