

BIOCHEMICAL AND NUTRACEUTICAL CHARACTERIZATION OF ITALIAN BEAN (*Phaseolus vulgaris* L.) ECOTYPES

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Common bean is a widely cultivated crop in Italy and nevertheless the relevant decreasing in production in all Europe, Italy, together with Spain is a leader in bean production (Laghetti, 2000). Trade necessities favoured bean commercial cultivars, confining local ecotypes in very small areas characterized by traditional cropping practices. To promote and to consolidate this crop in Italian cropping systems, an improvement of nutritional characteristics and an exploitation of “functional” properties of bean should be performed. Besides high protein and low fat content, legumes crops contain isoflavones, genistein, genistin, daidzein, daidzin. These substances exhibited a positive action on human health in preventing cancer, heart diseases, osteoporosis (Adlercreutz, 1995). In this perspective, aim of this work was to characterize three Italian bean ecotypes as “Fagiolo di Lamon”, “Fagiolo Zolfino del Pratomagno” and “Fagiolo di Sarconi” as regard biochemical and nutraceutical characteristics. Such an effort could contribute to the protection of these products and the characterization of isoflavones could represent the starting point for an exploitation of this crop as a “functional” one, that is able to give benefit to human health.

Literature cited

Adlercreutz, H. 1995. *Env. Health Persp.* 103, 103-112
Laghetti, A. 2000. *Alsia, Quaderni*, 2- 13-19.