

Studies on the Behaviour of Broccoli Hybrids Grown in Polyethylene Tunnels

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SUMMARY

Broccoli is one of the healthiest vegetable that can be found, that is why studying it seemed the right thing to do. The word broccoli, from the Italian plural of broccolo, refers to "the flowering top of a cabbage". Broccoli is classified in the Italica cultivar group of the species *Brassica oleracea* (Buck, 2009). Broccoli has large flower heads, usually green in color, arranged in a tree-like fashion on branches sprouting from a thick, edible stalk. The mass of flower heads is surrounded by leaves. Broccoli most closely resembles cauliflower, which is a different cultivar group of the same species (Ciofu *et al.*, 2003). Broccoli doesn't have a long history in Romania, it's cultivated on small parcels by small gardeners for their own consumption. Broccoli is high in vitamin C, as well as dietary fiber; it also contains multiple nutrients with potent anti-cancer properties, such as diindolylmethane and small amounts of selenium, also calcium and potassium (Kirsh *et al.*, 2007). Romania also has a temperate climate that is recommended for broccoli growing. It can be grown in early spring, spring and autumn. That is why the main scope of the research was to find the best way to produce broccoli. Six hybrids: Fiesta F1, Marathon F1, Belstar F1, Calabrese Nataliano F1, Ramoso Calabrese F1 and Mylady F1 were tested to see which one is the best suited for protected crop growing. The crop started in early spring, in a polyethylene tunnel, with seedlings. One of the important aspects of this culture was that no fertilizers and no chemicals were used to eliminate pests or diseases. The culture had three repetitions to eliminate any discrepancies. The yields were gathered from the repetitions and the average yield was calculated for a better understanding of the results. The yields were influenced by hybrids, thus it was determined which hybrid is better suited for early spring growing in polyethylene tunnels in Cluj, Romania. On this poster, the influence of hybrids upon total broccoli yields, it will be presented, to see which hybrid is worth growing.

Keywords: broccoli, hybrid, growth, yields, polyethylene tunnel

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