Rapid-cycling populations of brassica

Science, Biology



Brassicas have the potential to produce 10 generations of seed annually and act as prototypes for research in plant breeding, molecular biology, genetics, cell biology, host-parasite relations, plant biochemistry, etc. In addition to this, brassicas (due to their diversity) possess massive economic value as sources of animal fodder, industrial and edible oil, condiment mustard, and green manure. Staying with economic value, brassicas are also edible as vegetables, meaning they can be harvested and sold (Williams & Hill 1385). In terms of weaknesses, there exists greater divergence within brassica species in terms of form; this has led to taxonomic confusion (Williams & Hill 1385). It has already been established that there is a lot of variation in the attributes that distinguish intraspecific taxa. Another weakness is that despite their importance and diversity, there is little genetic information available on brassicas and radish (Williams & Hill 1386). This is brought about (partially) by the long reproductive cycles (6-12 months or more) for the majority of horticultural types.