**Abstract**

Oil in the form of triacylglycerols (TAGs) is quantitatively the most important storage form of energy for eukaryotic cells. Diacylglycerol acyltransferase (DGAT) is considered the rate-limiting enzyme for TAG accumulation. DGAT1 enzymes (acyl-CoA:diacylglycerol acyltransferase1) catalyse the formation of triacylglycerols (TAGs), the most abundant lipids in vegetable oils. Thorough understanding of the enzymology of oil accumulation is critical to the goal of modifying oilseeds for improved biodiesel production. Brassica napus, one of the world’s most important oil seed crops and is a bright-yellow flowering member of the family [Brassicaceae](https://en.wikipedia.org/wiki/Brassicaceae%22%20%5Co%20%22Brassicaceae) (mustard or cabbage family). *B.napus* is promising candidate for biodiesel production. The DNA extracted from selected plant sample and the DGAT gene has amplified through PCR techniques. The PCR amplification product having approximately 1500bp was sequenced edited and searched using BLAST against the known sequences within NCBI databases.