

The present invention relates to a process for the preparation of an xanthophyll, and in particular to a process for the preparation of an xanthophyll through the oxidation of a carotenoid in the presence of hydrogen peroxide and an iodine-containing compound. In particular, the process of the invention applies to the oxidation of beta-carotene to produce canthaxanthin, and to the oxidation of lutein or zeaxanthin to produce astaxanthin.