



# IConPB 2022

## 3<sup>rd</sup> International Congress on Plant Biology

### Congress Book

September 21-23, 2022  
Rize, Türkiye



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### Removal of Harmful Dyes Using Some Algae

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#### Abstract

Algae are defined as a group of predominantly aquatic, photosynthetic, and nucleus-bearing organisms that lack the true roots, stems, leaves, and specialised multicellular reproductive structures of plants. Algae have different applications, the most important of which is biological treatment. It is known that the harmful dyes released because of industrial production cause damage to the environment. In this review, information is given on the removal of undesired dyes by using some (*Chara contraria* A.Braun ex Kützing, *Cladophora glomerata* (L.) Kuetzing, *Tetradismus obliquus* (Turpin) M.J.Wynne). Google Scholar, Scopus, SpringerLink, Web of Science, and Mendeley databases were searched to obtain appropriate publications to support the goal of this study, using “*Chara contraria*”, “*Cladophora glomerata*”, “*Tetradismus obliquus*”, “Harmful Dyes”, “Biological treatment” and combinations of them. Due to the high tolerance value of these algae against harmful dyes, it has been determined that they are used in the removal of harmful dyes. In line with the results; It was determined that it was used in the removal of Lanaset Red G by *Chara contraria*, textile cotton dyes by *Cladophora glomerata* and methyl red by *Tetradismus obliquus*. Results indicate that these algae show a broad tolerance to hazardous dyes. The importance of algae for biological treatment and its economy has been determined.

**Keywords:** Textile dyes, biological treatment, Algae, hazardous dye.