## Ecological Applications Topic: Atrazine Rep. E AlQaffas

Atrazine is a commonly used herbicide in the United States and worldwide (1). Atrazine has been found to inhibit the photochemical activities of chloroplasts (2). Such photochemical activities are of great importance of different types of plants -such as C4 plants- despite their different enzymatic activities (3). Bioremediation is the process of removing toxin from a media -such as soil- by using microbes or plants (4). Different methods of Bioremediation have been used to treat contaminated soil such as microbial and plants genome modifications from different sources -i.e. humans' genes-(5). For example, transgenic plants Nicotiana Tabacum that expressed the genes CYP1A1 and CYP1A2 (Human genes) has enhanced metabolic activity against Atrazine (6). However, the introduction of genetically modified organisms to the open world has its own risks such as gene flow (7). Gene flow is the passing of genes from one population to another (8). Which was linked to the development of herbicides-resistance weed -including resistance to atrazine- (9 & 10).

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