

In vitro Selection of Specific ssDNA Aptamer Binding Glyphosate

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Glyphosate is a nonselective herbicide applied to the leaves of plants to kill both broadleaf plants and grasses. Recent studies have shown that glyphosate has carcinogenic potential and may cause adverse effects to animals and humans. Thus, there is a needed for simple, efficient and early detection of residue glyphosate. In this study, aptamers binding to the glyphosate were generated by SELEX. These aptamers can be applied to detect glyphosate in diverse matrices. This study was carried out with the support of "Cooperative Research Program for Agricultural Science & Technology Development (PJ011661)", Rural Development Administration, Republic of Korea. This work was supported by the Human Resource Training Program for Regional Innovation and Creativity through the Ministry of Education and National Research Foundation of Korea (NRF-2015H1C1A1035921).