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| Title | Accumulation of Zn, Cu, Fe, Mn and Pb Due to Brick Manufacturing in Agricultural Soils and Plants | | |
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| Published Journal Name | Dhaka University Journal of Biological Sciences | | |
| Type of Publication | Journal | | |
| Volume | 25 | Issue | 1 |
| Publisher | Dhaka University | | |
| Publication Date | 2016-06-28 | | |
| ISSN | 1021-2787 | | |
| DOI | <https://doi.org/10.3329/dujbs.v25i1.28497> | | |
| URL | https://www.banglajol.info/index.php/DUJBS/article/view/28497 | | |
| Other Related Info. | Pages 75-81 | | |
| **Keywords:** Accumulation, Brick kiln, Micronutrient, Heavy metal contamination | | | |
| Citation: Sikder, A. H. F., Khanom, S., Hossain, M. F., & Parveen, Z. (2016). Accumulation of Zn, Cu, Fe, Mn and Pb due to brick manufacturing in agricultutral soils and plants. Dhaka University Journal of Biological Sciences, 25(1), 75–81. | | | |

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| Abstract |  |
| Experiment was carried out to assess the concentration of Zn, Cu, Pb, Fe and Mn in agricultural soil and plant near selected brick kilns. Soils and plants samples were collected from four points such as 250, 500, 1000 and 1500 m away from brick kilns. Three metals were found at elevated levels in the soils near brick kilns such as, Pb (92.5 to 214 mg/kg), Zn (86 to 156 mg/kg) and Cu (24.7 to 46.9 mg/kg). It may be caused due to burning of poor quality coal and fire woods. The uptake of heavy metals in the nearest areas (250 m) of the brick kilns was significantly higher than the areas far from the brick production and their concentrations range from 7 to 543 mg/kg for Pb, 23 to 101 mg/kg for Zn, 10 to 41 mg/kg for Cu, 35 to 1309 mg/kg for Fe and 26 to 126 mg/kg for Mn. Results indicated that soils and plants accumulated maximum amount of micronutrients within 500 to 1000 m distance from brick kilns significantly decreased with distance. Iron and manganese were not polluting the soils near brick kilns but affecting the plants. Therefore, it can be suggested that no agricultural crops should be grown within 1000 m distance from a brick kiln. | |

**Please specify which Sustainable Development Goal (SDG) (s) falls under your research:**

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| Goal 1 | No Poverty | Goal 2 | Zero Hunger |
| Goal 3 | Good Health and Well-Being | Goal 4 | Quality Education |
| Goal 5 | Gender Equality | Goal 6 | Clean Water and Sanitation |
| Goal 7 | Affordable and Clean Energy | Goal 8 | Decent Work and Economic Growth |
| Goal 9 | Industry, Innovation and Infrastructure | Goal 10 | Reduced Inequalities |
| Goal 11 | Sustainable Cities and Communities | Goal 12 | Responsible Consumption and Production |
| Goal 13 | Climate Action | Goal 14 | Life below Water |
| **Goal 15** | **Life on Land** | Goal 16 | Peace, Justice and Strong Institutions |
| Goal 17 | Partnerships for the Goals |  |  |