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[\[PDF \(1076K\)\]](#) [\[References\]](#)**Monitoring survey of paddy rice herbicides in surface water at Sakura River and Lake Kasumigaura**Satoru Ishihara<sup>1)</sup>, Masumi Ishizaka<sup>1)</sup>, Takeshi Horio<sup>1)</sup>, Yuso Kobara<sup>1)</sup> and Masako Ueji<sup>1)</sup>

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**Summary:**

The eighteen kinds of paddy rice herbicides concentration in water samples at Sakura R. and L. Kasumigaura were monitored from 2001 to 2005. The highest concentrations of the rice herbicides were observed at Sakura R. during middle May to early June and these concentration levels at the midstream of Sakura R. were 0.12-8.8  $\mu\text{g} \cdot \text{l}^{-1}$ . The residual rice herbicides observed in Sakura R. water was rapidly diluted and dispersed in L. Kasumigaura and the dilution magnification from downstream of Sakura R. to Tsuchiura bay of L. Kasumigaura was 3 to 17 times. The annual trends of the detected rice herbicides concentration at midstream of Sakura R. were almost correlated with the annual trend of sales amounts of these rice herbicides in Ibaraki prefecture.

The levels of the rice herbicides at L. Kasumigaura did not exceed  $\text{EC}_{50}$  for fresh water algae. However the results of some rice herbicides' detected levels at Sakura R. exceeded  $\text{EC}_{50}$  for fresh water algae.

**Keywords:** rice herbicide, paddy field, monitoring, Lake Kasumigaura, Sakura River[\[PDF \(1076K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)

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