

# 2000年度，有明海に発生した赤潮発生機構に関する一考察

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## Abstract

Ariake Bay is one of representative semi-enclosed estuary in Japan. Recently, a red tide has appeared and it has brought serious environment problem and also damage for sea weed aqua-culture. Especially the red tide which appeared in winter 2000-2001, gave serious damage for sea weed aqua-culture. The cause of red tide is mainly attributed to eutrophication in that basin. In the case of Ariake Bay, it is believed that the construction of the wire in Isahaya Bay is another reason of red tide appearance.

The dominant species of the red tide appeared in 2000-2001 was *Rhizosolenia imbricate* which is found mainly in an oligotrophic region. The red tide continued for long term even in a nutrient depleted condition. This situation is different from the cause of red tide generation so far.

In this paper, we examined the cause of the red tide appeared in 2000-2001 by using of numerical model, and found that the maximum cell quota played important role on diatom-blooming and blooming duration.