蓮田研究室 論文発表

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題名	Development of auto-sampling machine for sanitary pest and surveillance
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概要	Sanitary pests such as mosquitoes and flies are known to transmit infectious diseases. According to the WHO reports in 2014, more than 720,000 people are killed by mosquitoes all over the world every year. Dengue fever which occurred in Yoyogi Park spreaded rapidly throughout Japan in August 2014, and disrupted society. The range of mosquito distribution is expanding due to global warming, and mosquito surveillance is conducted throughout Japan every year. Human decoy trap is widely used for mosquito surveillance. This trap has two problems, one of the problem is a risk that researchers get infected the mosquito-borne infection and the other problem that surveillance is prolonged. So researchers have heavy burden. Therefore, there is a great demand for unmanned and automated surveys. In this study, an automatic sampling machine that can be collected every certain time was developed for the purpose of unmanned and automated surveillance of sanitary pests.
関連画像	Release of carbon dioxide by dry ice by the smell of sweat, and heat. Suction the surrounding air with a fan (a) Acdes albopictus. (b) Armigeres subalbatus (c) Culex orientalis. Put hygiene pests such as mosquitoes in the container power supply and motor (d) Culex pipiens pallens (e) Culex sasai. Figure 9. Mosquito captured in this study.