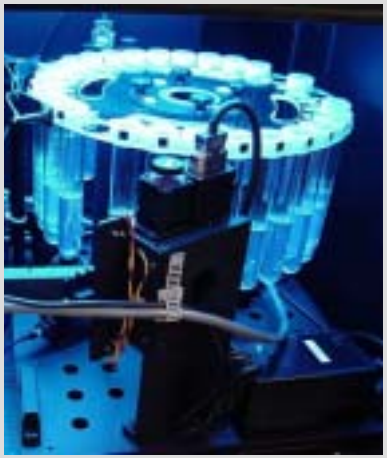
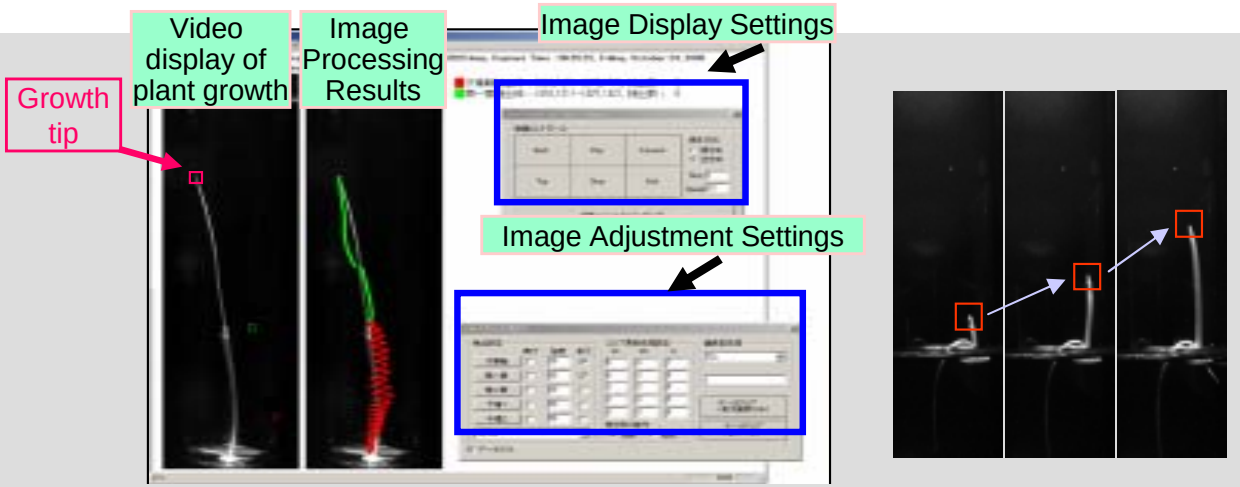
2004/10/14 Release

Automatic seedling growth monitoring technology with an accuracy of 0.5mm

- Revealing new facts which may contribute to variety and production improvement -



Growth monitor
recording plant growth by the minute



Automatic monitoring of the growth tip
(Right: Screen image of measurement software; Left: Example of analysis results)

The Central Research Laboratory of Hitachi, Ltd. (General Manager: Dr. NISHINO Toshikazu) has developed technology which automatically monitors the growth process of rice seedlings with image data by the minute with an accuracy of 0.5mm. As a result, new facts about the rice seedling's growth process are being clarified; such as, it was found that the rice leaf during the vegetative stage grew by about 80mm a day, about five times the level commonly believed. This technology is expected to become an important means for obtaining new information on the growth of agricultural products, and the relationship between the genetics and the growth environment.

This research was conducted as part of a national project, "Development of Rice Genome Simulators" (SY-1108), under the guidance of the Ministry of Agriculture, Forestry and Fisheries (Supervising body: Dr. HIGO Kenichi, Vice President (Plant Science), National Institute of Agrobiological Sciences). The results of this research will be on exhibition at the Agribusiness Creation Fair 2004, held at the Tokyo International Forum, from 14th-16th October 2004.

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