

BASF, Kubota and ZEN-NOH collaborates to help optimise Japan's rice production

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BASF, Kubota and ZEN-NOH will collaborate to help improve and optimize rice production in Japan. The collaboration consists of two phases, beginning with the integration of BASF's advanced xarvio® FIELD MANAGER crop optimization platform with Kubota's state-of-the art KSAS operating platform to assess operability.

By connecting xarvio FIELD MANAGER with Kubota's powerful KSAS farming and service support system, the seamless transfer and use of xarvio FIELD MANAGER's variable application maps for fertilization by KSAS compatible rice transplanter is realised, without the need for an added device for data transfer.

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The main aim of platform integration is to deliver greater convenience, increase yield, optimize fertilizer use, and provide a higher return on investment for farmers. This outcome would tackle many of the challenges affecting rice production in Japan, including an ageing workforce, labor shortages, and the consolidation of farmland. It would also help farmers become more sustainable, globally competitive and meet established fertilizer reduction targets listed in the country's MeaDRI strategy for sustainable food systems.

Phase two of the collaboration will test the performance of platform integration through field trials in rice crops, which will be managed by ZEN-NOH. The field trials will be held during the 2023 growing season and involve farmers experienced with using xarvio FIELD MANAGER, Kubota's KSAS platform and its machinery. Here farmers will use the KSAS platform and Kubota rice transplanters to implement field-specific, xarvio FIELD MANAGER variable application maps for fertilization.

The results of these new field trials will complement those achieved in more than 100 field trials conducted in rice crops last year by ZEN-NOH and BASF. In last year's field trials, xarvio FIELD MANAGER's variable application maps for fertilization were used and compared to standard fertilization application practices. By using xarvio FIELD MANAGER's variable application maps, yield increases of between 15% to 20% were achieved, with an average fertilizer input reduction of 10% recorded. In some cases, depending on field conditions, fertilizer use was reduced by up to 50%.

Konstantin Kretschun, Global Head of BASF Digital Farming, comments: "Rice farmers in Japan recognize the need to become more sustainable and globally competitive, while reducing environment impacts and meeting MeaDRI strategy targets. Climate smart farming technology provides a proven, effective and available solution to help them achieve these goals. By working closely with Kubota and our valued partner in ZEN-NOH to connect offerings, we can together deliver even greater value to farmers and positively transform rice production in Japan."