# A New Rice Variety "Yumeaoba"

Kiyoyuki Miura\*<sup>1</sup>, Yasuki Uehara\*<sup>2</sup>, Akira Kobayashi\*<sup>3</sup> Hisatoshi Ohta\*<sup>2</sup> Hiroyuki Shimizu\*<sup>4</sup>, Hideki Sasahara\*<sup>1</sup>, Kiyomi Fukui\*<sup>5</sup>, Yuzo Komaki\*<sup>5</sup>, Hiroshi Otsuki\*<sup>1</sup>, Akitoshi Goto\*<sup>1</sup> and Akiko Shigemune\*<sup>1</sup>

#### Summary

In the breeding program aiming at developing rice varieties with extreme high yielding ability, we bred a new rice variety, Yumeaoba, at the Hokuriku Research Center of the National Agricultural Research Center. This variety is a non-glutinous rice variety, suitable for whole crop silage (WCS), with early maturing, excellent lodging tolerance, and high yielding ability. Yumeaoba was bred from the progeny of a cross between Jyou 321 and Ouu 331 (named as Fukuhibiki later) in 1990. From the F<sub>11</sub> progenies, we selected one promising line and named Hokuriku 187, and submitted the line to various locations for evaluating local adaptability. Hokuriku 187 was officially registered as Paddy Rice Norin 398 in MAFF and in 2004 it was named as Yumeaoba.

Agronomic characters of Yumeaoba evaluated are as follows. Its heading date is slightly later than Fukuhibiki and 4 to 5 days earlier than Kusayutaka. The culm length is 9cm longer than that of Fukuhibiki, whereas it is 8 cm shorter than that of Todorokiwase. Its panicle length is slightly longer than Fukuhibiki and the panicle number is significantly less than those of Fukuhibiki and Todorokiwase. The plant type of this variety is classified into panicle weight type. The shape of brown rice is slightly slender and 1000-kernel weight is estimated to be about 26.5 g. The dry matter yield in the yellow-ripe stage is more than those of Fukuhibiki and Todorokiwase in transplanting culture and direct sowing in flooded paddy fields. The total digestive nutrients (TDN) in the yellow-ripe stage are estimated to be nearly 60%, which corresponds to that of timothy grass in its heading stage. Yumeaoba is estimated to possess true blast resistance genes, *Pita-2* and *Pib*, but its field resistances for leaf blast and panicle blast are not known. To stripe virus disease and bacterial leaf blight, this variety appears to be resistant. Yumeaoba is tolerant to lodging and suitable for direct sowing in flooded paddy fields. Its tolerance to sprouting is moderate, but its cool weather tolerance is weak. Thus, Yumeaoba can be grown in regions from middle-Tohoku area to Kyushu area for the use of WCS.

Received 27 December 2004; Accepted 13 June 2005

<sup>\*1</sup> Hokuriku Research Center, National Agricultural Research Center

<sup>\*2</sup> National Institute of Crop Science

<sup>\*3</sup> Kidamarihigashidai, Tsuchiura, Ibaraki 300-0027, Japan

<sup>\*4</sup> National Agricultural Research Center for Hokkaido Region

<sup>\*5</sup> Kagoshima Agricultural Experiment Station

### V 栽培適地および栽培上の留意点

「夢あおば」の適地はこの早晩性の特徴から判断すると、東北中南部、北陸および関東以西である。 奨励品種決定基本調査の概評を表28に示した。品質および食味が不十分であること等の理由から、一般食用としての評価は低いが、稲発酵粗飼料として利用する場合には、耐倒伏性が"極強"であることや全重から判断して、東北中南部から九州に至る広い地域で栽培が可能と考えられる。

「夢あおば」の栽培上の留意点は以下のとおりである。

1. *Pita-2とPibのい*もち病真性抵抗性遺伝子を持つため、現在のところ、いもち病の発病は認めら

れないが、いもち病菌の新レースの出現による発病の可能性があるため、発病が認められた場合、稲発酵粗飼料生産・給与技術マニュアル <sup>(5)</sup> に従って、直ちに防除を行う。

- 2. 障害型耐冷性が弱いので、冷害常襲地での作付けは避ける.
- 3. 穂数が少ないので、分げつ数を確保するために、一般食用品種よりも増肥する必要がある. しかし、極端な多肥栽培では倒伏する可能性もあるため、地力に合わせた施肥を行う.
- 4. 跡作への異株混入の原因となる籾の落下を防ぐため刈り遅れに注意する.

## VI 命名の由来および育成従事者

「夢あおば」の命名の由来は、飼料稲により水田 が未来永劫守られることを夢見て命名された。

「夢あおば」の育成従事者は表29のとおりである.

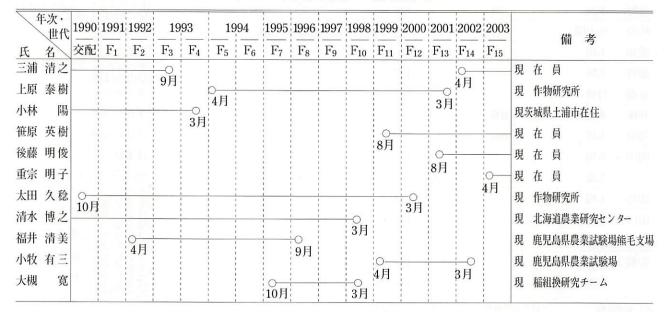


表29 「夢あおば」の育成従事者

# Ⅷ 摘 要

「夢あおば」は中央農業総合研究センター・北陸 研究センター(旧北陸農業試験場)で1990年に極多 収の育成を目的として、日印交雑種の穂重型系統 「上321」を母とし、東北農業試験場(現在の東北農