

KSB54, a new variety with moderate resistance to Mekong Delta population of brown planthopper (BPH) (*Nilaparvata lugens* Stål)

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KSB54, derived from cross IR18189-2-3/IR36, was released in Mar 1992 for use in the Mekong Delta area.

It is 85-95 cm tall and has a 105-110 d growth duration. It has long slender grain, good cooking quality, and a 1,000-grain weight of 26 g. It is drought- and sulfate acid soil-tolerant.

KSB54 is moderately resistant to the Mekong Delta BPH population, although neither of its parents are resistant (Table 1). In a BPH field survey, KSB54 scored and performed about the same as moderately resistant IR66 and as good as popular varieties IR64 and IR13240-108-2-3 or better (Table 2).

Mean grain yield was 5.6 t/ha across five successive trials at IAS in 1989-91 and 4.9 t/ha in IAS multisite trials in 1990, compared with 4.8 and 5.0 t/ha, respectively, for check IR13240-108-2-3.

KSB54 is planted on about 15,000 ha in the Mekong Delta. ■

Zhenong 8010: a new indica rice variety with high yield, blast (BI) resistance, and good quality

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Table 1. Yield potential of Zhenong 8010 in China, 1992.

Site	Yield (t/ha)	Increase over check ^a (%)
Hangzhou, Zhejiang	7.6	4.4
Ningbo, Zhejiang	7.7	0.1
Yuhuan, Zhejiang	8.5	11.4
Yiyang, Hunan	7.1	22.1
Changting, Fujian	7.7	22.5
Ganzhou, Jiangxi	6.4	21.6

^a Guangluai 4.

Table 1. Reaction of KSB54 and its parents to BPH.

Variety	Reaction to BPH ^a		
	Biotype 2	Biotype 3	Mekong Delta population
KSB54	R	R	MR
IR18189-2-3	R	S	S
IR36	R	R	S

^a R = resistant, MR = moderately resistant, and S = susceptible.

Table 2. Performance of KSB54 and other varieties in BPH field nursery in Tien Giang, Vietnam, 1991 wet season.

Variety	Days after transplanting					
	65		70		75	
	BPH/hill (no.)	Score ^a	BPH/hill (no.)	Score	BPH/hill (no.)	Score
KSB54	554	5.0	179	5.6	21	5.6
IR66	380	5.0	112	8.3	10	8.3
MTL 61	276	7.6	24	8.3	1	9.0
IR13240-108-2-3	482	5.0	157	7.0	20	7.6
IR64	567	3.0	237	4.3	33	5.0
TN1 (susceptible check)	419	9.0	33	9.0	1	9.0
IR50404-57-2-2-3	342	4.3	147	4.3	18	4.3

^a Scored using Standard evaluation system for rice scale of 0-9.

Zhenong 8010 is a new semidwarf indica rice variety derived from the indica × japonica cross of Keqing 3/IR29/8004. Zhenong 8010 is suitable for both seasons in the double-cropped area of southern China. It was released in Jan 1993 as an early rice variety. About 7,000 ha in southern China are planted to Zhenong 8010, which has a growth duration of about 116 d.

Zhenong 8010 has high, stable yield potential under normal fertilization. It yielded 6.4-8.5 t/ha in regional trials in 1992 (Table 1), which was 0.1-22.5% more than the check. Its leaf BI and neck BI resistance scores were 1.7 and 0.8,

compared with check Guangluai 4, which scored 5.7 and 6.8, respectively.

Morphoagronomic characters are in Table 2. Appearance, hulling recovery, milling recovery, gel consistency, protein content, and cooking and eating quality meet China's national index for good-quality rice. Grain length is 6.8 mm with a 3.0 length-breadth ratio. Grain is semitranslucent with 14.4% protein content, 8.4% amylose, low gel consistency (97 mm), and high gelatinization temperature (alkali spreading value of 3). Hulling recovery is 80.8%; milling recovery, 72.7%; and head rice recovery, 45.5%. ■

Table 2. Morphoagronomic characters of Zhenong 8010 at different sites in China, 1992.

Character	Site			
	Hangzhou, Zhejiang	Taojiang, Hunan	Changting, Fujian	Fenji Jiangxi
Plant height (cm)	79.5	79.8	83.0	89.0
Panicle length (cm)	17.9	20.9	18.5	19.0
Grains (no./panicle)	78.8	112.3	88.5	93.7
Fertility (%)	87.5	63.8	90.3	70.5
1,000-grain wt (g)	23.2	22.5	24.5	23.0