

이앙기 ( 19.5 % ), 품종 ( 17.9 % ), 지역 ( 10.5 % ), 년도 ( 4.8 % )  
질소 ( 0.9 % ) 의 순서였으며 기타는 46.5 % 였다.

- ④ 각 요인의 수준 변화에 의한 수량과 수량구성 요소의 관계는  
년도변인에서는 수수와 입수, 지역변인에서는 입수, 품종변인에서  
는 입수, 질소변인에서는 수수, 이앙기변인에서는 입수, 등숙율, 천  
립중이 각각 수량과 유의성 있는 상관을 보였다.
- ⑤ 본 분석에서 얻은 효과를 기초로 수량예측 가능 모형을 얻을  
수 있었다.

#### 4. Shattering Loss of Grain in Relation to Striking Force dur- ing Harvest and Year-variation of Grain Tensile Strength in Rice.

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Milyang 23, Hangangchal ( Suweon 290 ), Taebaek ( Suweon 287 ), and  
Jinheung were used for this study in 1982.

The panicles detached from the plants at the panicle neck  
were dropped onto the concrete floor at the heights of 25, 50,  
75, 100, 150 and 200 Cm. Thus, the ratio of the number of shatt-  
aed grains to the total number of grains in the dropped panicle

was expressed as the degree of grain shattering.

Tensile strength with rice shattering tester(Kiya No.150, Tokyo, Japan).

The results are summarized as follows;

- ① Four tested varieties varied in average tensile strength showed 75.8g in Milyang 23, 110g in Hangangchal, 160.5 g in Taeback and 170.9 g in Jinheung.
- ② Extrapolation of the average tensile strength for the zero field loss of grain was about 170 g.
- ③ Moisture contents of Cutting position of straw in binder harvesting were 76.0% ~ 86.7% in culm and 76.7% ~ 77.8% in leaf sheath.
- ④ Loss of grain caused by binder harvesting in the field was equalized to the degree of shattering by at falling test at falling test at falling height 25 ~ 50 cm .
- ⑤ The tensile strength of grains and its variance varied significantly yearly within the same variety.