**Estimate of grain yield via rows**

Name.............................................................................
Date...............................................................................
Crop type.......................................................................
Variety............................................................................
Location..........................................................................
Anticipated 100-grain weight................................grams
Therefore “K” from Table 1 = ..............................................................

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Count No.**  | **Heads/50cm** | **Grains/head** | **Count No.** | **Heads/50cm**  | **Grains/head** |
| **1** |  |  | **21** |  |  |
| **2** |  |  | **22** |  |  |
| **3** |  |  | **23** |  |  |
| **4** |  |  | **24** |  |  |
| **5** |  |  | **25** |  |  |
| **6** |  |  | **26** |  |  |
| **7** |  |  | **27** |  |  |
| **8** |  |  | **28** |  |  |
| **9** |  |  | **29** |  |  |
| **10** |  |  | **30** |  |  |
| **11** |  |  | **31** |  |  |
| **12** |  |  | **32** |  |  |
| **13** |  |  | **33** |  |  |
| **14** |  |  | **34** |  |  |
| **15** |  |  | **35** |  |  |
| **16** |  |  | **36** |  |  |
| **17** |  |  | **37** |  |  |
| **18** |  |  | **38** |  |  |
| **19** |  |  | **39** |  |  |
| **20** |  |  | **40** |  |  |
| **Average** | **(H)** | **(GH)** |  |  |  |

**Calculation**

Yield (t/ha) = (H) ................................ x (GH)............................../ "K" ...........................

Correction for row spacing other than 17.5cm

Yield (t/ha) = Above estimate x conversion factor (from Table 2)

= ..................................x ................................... = .......................................... t/ha

**Table 1. Known constant “K” for various grain weights**

|  |  |
| --- | --- |
| **Weight of 100 grains(grams)** | **Known constant (K)(grains in 50 cm of row at****17.5cm spacing for 1 t/ha)** |
| 2.6 | 336 |
| 2.8 | 312 |
| 3.0 | 292 |
| 3.2 | 273 |
| 3.4 | 257 |
| 3.6 (typical of wheat) | 243 |
| 3.8 | 230 |
| 4.0 (typical of oats) | 219 |
| 4.2 | 208 |
| 4.4 (typical of barley) | 199 |
| 4.6 | 190 |
| 4.8 | 182 |
| 16 (typical of lupin - narrow leaf type) | 55 |
| 18 (typical of chickpea - desi) | 47 |
| 20 (typical of field pea) | 44 |
| 30 (typical of lupin - broad leaf type) | 29 |
| 40 (typical of chickpea - kabuli type) | 22 |
| 50 (faba bean) | 17.5 |
| 70 (faba bean - large) | 12.5 |

**Table 2 Conversion factors that adjust yield estimates for different row spacings**

|  |  |
| --- | --- |
| **Row spacing (cm)**  | **Conversion factor** |
| 15  | 1.17 |
| 17.5 | 1.00 |
| 20 | 0.88 |
| 22.5 | 0.78 |
| 25 | 0.70 |
| 27.5 | 0.64 |
| 30 | 0.58 |
| 32.5 | 0.54 |
| 35 | 0.50 |