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TrAE AU Rubric Cultivar Source: New Zealand Institute for Crop and Food Research Ltd., Lincoln NZ and CIMMYT, Mexico (DF) MX CID:7503 SID:?

Allen Newman (author). Descriptions: Triticum aestivum, wheat: 'Rubric'. *Plant Varieties J. (AU)* 15 (2): 83-84, Fig 49 (2002) On 2003-12-09 plant breeders' rights were granted to New Zealand Institute for Crop and Food Research Limited..

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**IWIS-Bib
6766**



Plant Breeders Rights - Search Result Details

Wheat (*Triticum aestivum*)

Variety: 'Rubric'
Synonym: N/A

Application no: 2001/002
Current status: GRANTED
Certificate no: 2349
Received: 02-Jan-2001
Refused: N/A
Accepted: 09-Mar-2001
Withdrawn: N/A
Granted: 09-Dec-2003
Terminated: N/A



[full image and caption](#)
(click to enlarge)

Description

published in **Plant Varieties Journal**: Volume 15, Issue 2

The detailed description of this variety is available in [Word](#) format.

Title Holder: New Zealand Institute for Crop & Food Research Limited

Agent: Heritage Seeds Pty Ltd

Telephone: 0395616014

Fax: N/A

Date of effect: 24-May-2005

[PBR Database Search Home](#)

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Department of
AGRICULTURE
FISHERIES &
FORESTRY -
AUSTRALIA



Plant Varieties Journal

Quarter Two 2002

Volume 15

Number 2



Treloar
ROSES

'Korpancom' – a new Ground Cover Variety

AGRICULTURE, FISHERIES AND FORESTRY - AUSTRALIA

'Rubric'

Application No: 2001/002 Accepted: 9 Mar 2001.

Applicant: **NZ Institute for Crop and Food Research Ltd**, Albury, NSW.

Agent: **Heritage Seeds Pty Ltd**, Howlong, NSW.

Characteristics (Table 46, Figure 49) Plant: growth habit intermediate, length medium (94.2cm). Flag leaf: anthocyanin colouration of auricles weak, frequency of plants with recurved flag leaves medium to high, glaucosity of sheath medium. Time of ear emergence: medium. Ear: glaucosity weak to medium, shape in profile parallel sided, density medium to dense, length medium to long (102.26mm). Culm: glaucosity of neck medium to strong. Straw: pith in cross-section medium. Awns: present, at tip of ear, length medium (73.92mm). Ear: colour white. Apical rachis segment: hairiness of convex surface weak. Lower glume: shoulder width broad, shoulder shape slightly sloping, beak length very long, beak shape straight, extent of internal hairs medium. Lowest lemma: beak shape slightly curved. Grain colour: red. Seasonal type: spring.

Origin and Breeding Controlled pollination followed by single plant selection: approx 4,000 seeds from the CIMMYT "EMU" bulk (Tob's'/Npo//No66/Era/3/Bd/-Gallo) were sown as spaced plants at CFR Lincoln in the summer of 1993-94. Approx 400 single plant selections were made and resown in the summer of 1994-95. Sixty seven individual plants were selected and sown in single head pots in quarantine in 1995. No selections were made in quarantine. The 67 lines were sown at Howlong as hill plots in 1996 and 5 primary and 6 secondary selections were made, based on vigour, type, disease reaction, tiller number, grain yield, grain weight and screenings. The 11 reselections were resown at Howlong in 1997 and the 5 primary selections were sown in a number of off-station trials and from these 3 selections were made, of which 5170 was one. The 3 lines were test milled and baked. The 3 selections were resown in 1998 at Howlong and in further off-station trials and 5170 was selected as the line to be advanced and has since undergone more extensive field evaluation, test milling and baking trials. Selection criteria: grain yield, large grain, early maturity, disease resistance, medium height and straw strength. Propagation: seed. Breeder: Crop and Food Research and CIMMYT.

Choice of Comparators The grouping characteristics used in identifying the most similar varieties of common knowledge were – Time of maturity: early, Seasonal type: spring. On the basis of these grouping characteristics, 'Janz', 'Meering' and 'Diamondbird' (all white grained) were included in the trial. However, the candidate variety is a red grained spring wheat and therefore it is quite distinguishable from all white grained spring wheat varieties. 'Monad' (red grained) was excluded because it is a facultative winter wheat. 'Declic' (red grained) was excluded for the same reason. The source material was excluded because it is a segregating population originating from a complex cross of multiple parents (as indicated above). The expanded pedigree goes back 20 levels and the Mendelian ratio indicates that "Emu" bulk is segregating for the parental characteristics.

Comparative Trial Location: sown on "Shrublands", Heritage Seeds' Research facility, Riverina Highway, Howlong, NSW, (Latitude 35°60' South, elevation 150m), autumn-summer 2001. Conditions: trial sown into a red-brown soil with good moisture levels at 80 kg/ha sowing rate with 100 kg/ha of DAP. Trial design: randomised plots 1.2m x 5m in 3 replicates. Measurements: five plants randomly selected per replicate from a total of approximately 1,200 plants.

Prior Applications and Sales Nil.

Description: **Allen Newman**, Heritage Seeds, Howlong, NSW.

Table 46 *Triticum* varieties

	'Rubric'	*'Janz'	*'Meering'	*'Diamond-bird'
PLANT: GROWTH HABIT				
	intermediate	intermediate	semi-erect	semi-erect
FLAG LEAF: ANTHOCYANIN COLOURATION OF AURICLES				
	weak	absent or very weak	absent or very weak	absent or very weak
PLANT: FREQUENCY OF PLANTS WITH RECURVED FLAG LEAVES				
	medium-high	medium	medium	high
FLAG LEAF: GLAUCOSITY OF SHEATH				
	6	5	6	6
FLAG LEAF: WIDTH (mm)				
mean	18.95	14.91	13.93	15.21
std deviation	2.13	1.31	0.40	0.74
LSD/sig	3.9	P≤0.01	P≤0.01	ns
EAR: GLAUCOSITY				
	2	2	2	1
CULM: GLAUCOSITY OF NECK				
	medium-strong	medium-strong	strong	strong
STRAW: PITH IN CROSS-SECTION (halfway between base of ear and stem node below)				
	medium	medium-thin	thin	thin
EAR: SHAPE IN PROFILE				
	parallel sided	parallel sided	parallel sided	tapering
EAR: DENSITY				
	medium-dense	medium	medium	medium
AWNS OR SCURS: LENGTH AT THE TIP OF THE EAR (mm)				
mean	73.92	62.36	58.87	61.21
std deviation	4.38	5.62	3.59	1.02
LSD/sig	13	ns	P≤0.01	ns

APICAL RACHIS SEGMENT: HAIRINESS OF CONVEX SURFACE

weak	absent or very weak	absent or very weak	absent or very weak
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LOWER GLUME: SHOULDER WIDTH (spikelet in mid third of ear)

broad	narrow	narrow	narrow
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LOWER GLUME: SHOULDER SHAPE

slightly sloping	elevated	sloping	slightly sloping
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LOWER GLUME: BEAK LENGTH

very long	long	long	long
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LOWER GLUME: BEAK SHAPE

straight	slightly curved	slightly curved	slightly curved
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LOWER GLUME: EXTENT OF INTERNAL HAIRS

medium	strong	strong	weak
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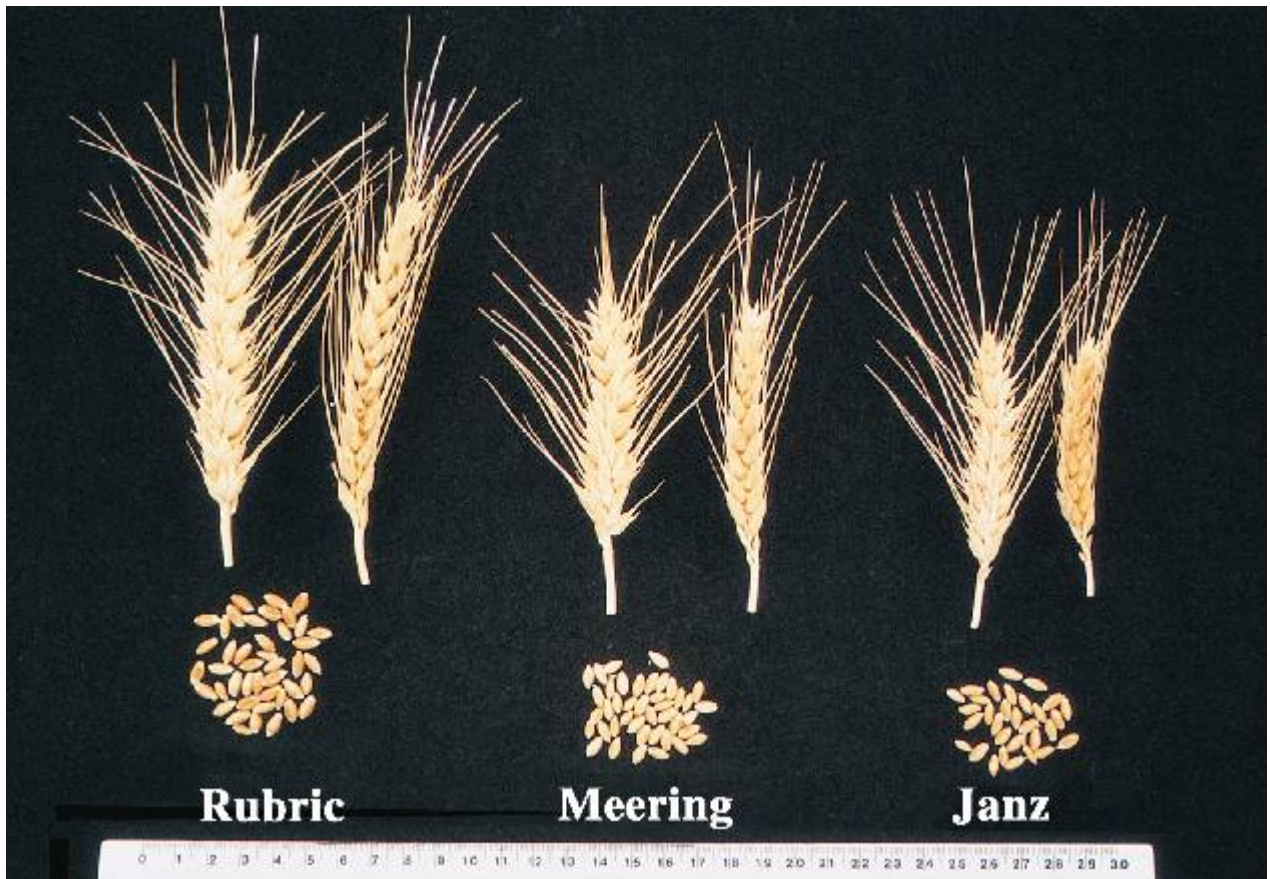
GRAIN: COLOUR

red	white	white	white
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Plant Breeders Rights - Search Result Image

Wheat (*Triticum aestivum*)



Wheat – ears and grain of 'Rubric' (left) with comparators 'Meering' (centre) and 'Janz' (right) showing differences in ear structure, length and grain colour.

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