

**Simplified standard protocol for *Brassica juncea* L. (NAKT\_MSB04)**

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Botanical taxon:	<i>Brassica juncea</i> L.	
Common Name (when known):	Bladmosterd (NL); Brown Mustard (EN)	
Date of preparation of NP:	2004	
NP data prepared by:	W. Sangster	
Sample to be examined:	Seed	
Number of growing cycles:	2 years	
Closing date for applications:		
- Vegetable varieties:	15-01	
- Agricultural varieties:	01-07	
Submission date/period:		
- Vegetable varieties:	01-02	
- Agricultural varieties:	01-08	
Seed/Plant Quantity		
- Vegetable varieties:	5000 seeds	
- Agricultural varieties:	5000 seeds	
Seed /Plant Quality		
- Vegetable varieties:	Minimum germination rate 75% after 10 days.	
- Agricultural varieties:	Minimum germination rate 75% after 10 days.	
Special conditions sample:		
- Vegetable varieties:	not appl.	
- Agricultural varieties:	not appl.	
Test station address:	Naktuinbouw, Sotaweg 22, 2371 GD Roelofarendsveen	
Name:	Wim Sangster	
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E-mail:	<a href="mailto:w.sangster@naktuinbouw.nl">w.sangster@naktuinbouw.nl</a>	
List of grouping characteristics:	Yes, (if yes put as annex)	
Minimum number of plants in trial		
- Vegetable varieties:	Vegetative: not appl.	Seed: 40
- Agricultural varieties:	Vegetative: not appl.	Seed: 90
Minimum number of plants observed by measuring or counting:		
- Vegetable varieties:	Vegetative: not appl.	Seed: 20
- Agricultural varieties:	Vegetative: not appl.	Seed: 60
Give description of when/where observations on the leaf should take place:	At fully grown plants	
Give description of when/where the other observations should take place:	From start bolting to start flowering	
Test will take place:		
- Vegetable varieties:	Greenhouse	
- Agricultural varieties:	Outdoor	

Uniformity:

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

The assessment of uniformity should be according to the recommendations for cross pollinated varieties in the General Introduction.

The assessment of uniformity for hybrid varieties depends on the type of hybrid and should be according to the recommendations for hybrid varieties in the General Introduction.

For the assessment of uniformity of inbred line varieties, a population standard of 1 % and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 40 plants, 2 off-types are allowed.

Table of characteristics:                   PRESENT (see annex II)  
(if present, please annex the table of characteristics and explanations)

Literature:

TG/BRASS\_JUN(proj.1)

General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of new Varieties of Plants  
<http://www.upov.int/tgp/en/>

**Annex I: grouping characteristics (NAKT\_MSB04)**

Characteristic	Expression	Note
10 Leaf blade: anthocyanin coloration	absent	1
	present	9
14 Leaf blade: lobes (division to midrib)	absent	1
	present	9

**Annex II: Table of characteristics Brassica juncea L. (NAKT\_MSB04)**

Characteristic	Expression	Note
1 Only for agricultural varieties: Ploidy	diploid	2
	tetraploid	4
2 Seedling: anthocyanin coloration of hypocotyl	absent	1
	present	9
3 Cotyledon: size	very small	1
	small	3
	medium	5
	large	7
	very large	9
4 <b>Leaf: attitude</b>	erect	1
	erect to semi-erect	2
	semi-erect	3
	semi-erect to horizontal	4
	horizontal	5
5 Leaf: length	very short	1
	short	3
	medium	5
	long	7
	very long	9
6 Leaf: width	very narrow	1
	narrow	3
	medium	5
	broad	7
	very broad	9
7 Leaf blade: shape of apex	acute	1
	rounded	2
8 Leaf blade: hue of green colour	absent	1
	yellowish	2
	greyish	3
9 Leaf blade: intensity of green coloration	very light	1
	light	3
	medium	5
	dark	7
	very dark	9
10 Leaf blade: anthocyanin coloration	absent	1
	present	9
11 Leaf blade: intensity of anthocyanin coloration	very light	1
	light	3
	medium	5
	dark	7
	very dark	9
12 Leaf blade: distribution of anthocyanin	localised	1
	entire	2

13 Leaf blade: kind of anthocyanin distribution	diffused only	1 ●
	in spots only	2
	diffused and in spots	3
14 Leaf blade: lobes (division to midrib)	absent	1
	present	9

15 Leaf blade: number of lobes	very few	1
	few	3
	medium	5
	many	7
	very many	9
16 Leaf blade: size of terminal lobe	very small	1
	small	3
	medium	5
	large	7
	very large	9
17 Leaf blade: undulation of margin	absent or very weak	1
	weak	3
	medium	5
	strong	7
	very strong	9
18 Leaf blade: depth of incision of margin	very shallow	1
	shallow	3
	medium	5
	deep	7
	very deep	9
19 Leaf blade: blistering	absent or very weak	1
	weak	3
	medium	5
	strong	7
	very strong	9
20 Leaf blade: hairiness of upper side	absent or very weak	1
	weak	3
	medium	5
	strong	7
	very strong	9
21 Leaf blade: width of midrib	very narrow	1
	narrow	3
	medium	5
	broad	7
	very broad	9
22 Leaf blade: anthocyanin coloration of main vein	absent	1
	present	9
23 Leaf blade: anthocyanin coloration of secondary veins	absent	1
	present	9
24 Petiole: anthocyanin coloration	absent	1
	present	9
	very weak	1

25	Petiole: intensity of anthocyanin coloration	weak	3
		medium	5
		strong	7
		very strong	9
26	Flower: colour	white	1
		yellow	2
27	Time of harvest maturity	very early	1
		early	3
		medium	5
		late	7
28	Time of beginning of bolting	very late	9
		very early	1
		early	3
		medium	5
		late	7
		very late	9