



APPLICATIONS UNDER EXAMINATION

LETTUCE

LETTUCE (*Lactuca sativa*)

Proposed denomination: 'Matthew'
Application number: 19-9711
Application date: 2019/01/25
Applicant: Nunhems B.V., Nunhem, Netherlands
Agent in Canada: Aventum IP Law LLP, Ottawa, Ontario
Breeder: Johan van Zee, Nunhems B.V., Nunhem, Netherlands

Variety used for comparison: 'Deangelia'

Summary: *The leaf of 'Matthew' has very weak to weak blistering while the leaf of 'Deangelia' has a weak to medium degree of blistering. The time of harvest maturity of 'Matthew' occurs later than that of 'Deangelia'. The plants of 'Matthew' are resistant to Lettuce mosaic virus pathotype II while the plants of 'Deangelia' are susceptible.*

Description:

PLANT: butterhead type, in glasshouse culture, small to medium diameter, absent or weak to medium degree to overlapping of upper part of leaves, absent or weak axillary sprouting, early to mid-season harvest maturity, begins bolting very late under long day conditions, medium to strong intensity of fasciation at flowering stage

HEAD: medium sized, circular shape in longitudinal section, medium density

LEAF: medium thickness, semi-erect attitude at harvest maturity, absent or very few divisions, narrow oblate to circular shape, rounded tip, flat in longitudinal section, absent or very weak intensity of anthocyanin colouration, medium green, weak glossiness of upper side, very weak to weak blistering, medium to large blisters

LEAF BLADE: absent or very weak undulation of margin, venation is not flabellate

SEED: white seed coat

DISEASE REACTIONS: resistance to *Bremia lactucae* isolates Bl:16EU, Bl:17EU, Bl:20 EU, Bl:21 EU, Bl:22 EU, Bl:23 EU, Bl:24 EU, Bl:25 EU, Bl:26 EU, Bl:27 EU, Bl:29 EU, Bl:30 EU, Bl:31 EU, Bl:33 EU, Bl:35 EU, Lettuce mosaic virus (LMV) pathotype II and *Nasonovia ribisnigri* (Nr) biotype Nr:0 present

Origin and Breeding: 'Matthew' (breeder code NUN 02649 LTL) originated from a cross conducted in 2010 in Gravenzande, Netherlands. The criteria used for making selections were head and base shape combined with resistance to bolting and *Bremia lactucae*. The variety was stable in 2018 after 9 generations of pedigree and line selections and it later became known as 'Matthew'.

Tests and Trials: The detailed description of 'Matthew' is based on the UPOV report of Technical Examination, application number SLA4160, purchased from the Naktuinbouw in Roelofarendsveen, Netherlands. The trial was conducted by the Naktuinbouw in Roelofarendsveen, Netherlands in 2020.



Lettuce: 'Matthew'



Lettuce: Reference variety 'Deangelia'