APPLICATIONS UNDER EXAMINATION

LENTIL

LENTIL

(Lens culinaris)

Proposed denomination: 'CDC Jimini' **Application number:** 19-9921 **Application date:** 2019/05/31

Applicant: University of Saskatchewan, Saskatchewan

Breeder: Albert Vandenberg, University of Saskatchewan, Saskatchewan

Variety used for comparison: 'CDC Imvincible'

Summary: In longitudinal cross-section, the profile of the seed of 'CDC Jimini' is broad elliptic whereas it is elliptic for 'CDC Invincible'. The seed weight of 'CDC Jimini' is greater than that of 'CDC Invincible'.

Description:

COTYLEDON: yellow

PLANT: matures early to mid-season

STEM: medium intensity of anthocyanin colouration

LEAF: elliptic

FLOWER: flowers mid-season, medium size, white standard with weak violet stripes, violet stripes absent on wings

POD: mainly two ovules, yellow at maturity, truncate shaped apex

DRY SEED: narrow, broad elliptic in longitudinal cross-section, one main colour on testa, yellowish green with a grey spotted pattern on testa of 13% of seeds, dull brown hilum

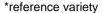
USE: human consumption

Origin and Breeding: 'CDC Jimini' (experimental designation IBC1014-SG) originated from the cross between 'CDC Maxim' and 3592-13 conducted at the Crop Development Centre, University of Saskatchewan, Saskatoon, Saskatchewan in 2012. Selections were made from the F1 to F4 generations based on yield, seed weight, seed size, seed coat colour, cotyledon colour, days to flower, days to maturity, lodging resistance, plant height and disease resistance. Two sub-lines selected from the F4 generation were used to establish breeder seed in 2019.

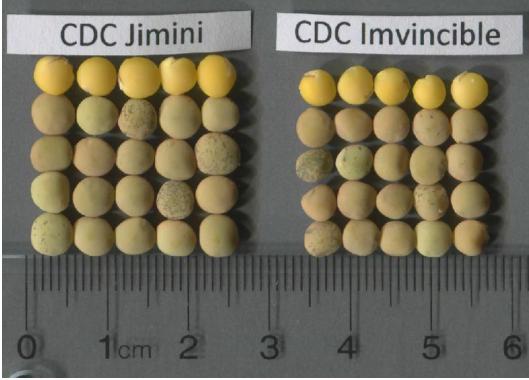
Tests and Trials: The comparative trials for 'CDC Jimini' were conducted at the Crop Development Centre of the University of Saskatchewan, Saskatoon, Saskatchewan in 2019 and 2021. The trials were conducted using a RCB design consisting of 2 replications per variety. Each replicate consisted of 3 rows spaced 30 cm apart, with a row length of 3.66 metres and a planting density of 94 seeds per square metre. Measured characteristics were based on 20 measurements per variety per year except for seed weight which was based on a minimum of 8 measurements per variety per year. Mean differences were significant at the 5% probability level based on LSD values.

Comparison table for 'CDC Jimini'

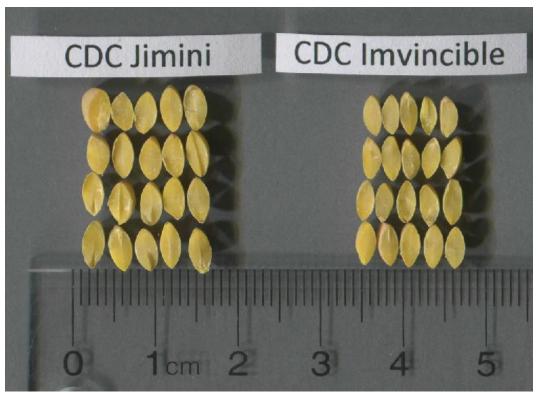
	'CDC Jimini'	'CDC Imvincible'*
Seed weight (grams per 100 seeds)		
mean 2019 (LSD=0.6)	4.1	3.3
std. deviation 2019	0.1	0.1
mean 2021 (LSD=0.4)	4.2	3.6
std. deviation 2021	0.1	0.1







Lentil: 'CDC Jimini' (left) with reference variety 'CDC Imvincible' (right)



Lentil: 'CDC Jimini' (left) with reference variety 'CDC Imvincible' (right)