PRODUCT	*Vaccinium macrocarpon* (Cranberry) Fruit
PART NUMBER	00031152
REFERENCE TYPE	Biomass Reference Material (BRM) *
LOT NUMBER	00031152-410
COMMON NAME	Cranberry
LATIN NAME	*Vaccinium macrocarpon* Aiton. [Ericaceae]
PLANT PART	Fruit
CDXP NUMBER	CDXA-10-1727
REPORT NUMBER	CDXA-BRMR-139-02
DATE OF SAMPLE	03/08/2011
DATE OF RE-EVALUATION	02/26/2016 (1st); 04/21/2020 (2nd)
DATE OF REPORT	06/10/2020

***Note –** Biomass Reference Material (BRM) is not a voucher specimen

ANALYTICAL RESULTS

TEST	METHOD	RESULT
Appearance	Macroscopy	(1) Milled: Pink powder
Anatomy/Morphology	Microscopy	(1) Exocarp showing naturally occurring red anthocyanin pigments (100x) (2) Reticulately thickened cells of the testa (200x)
HP-TLC	CDXA-TLCM-091-01	Conforms

STORAGE CONDITIONS

STORAGE	20-30 °C; Dry storage area; Insect free; Volatile free
EXPIRATION DATE	04/2025 under the above conditions

Elizabeth Hughes
Quality Assurance Specialist Assistant
Designee of QA Management

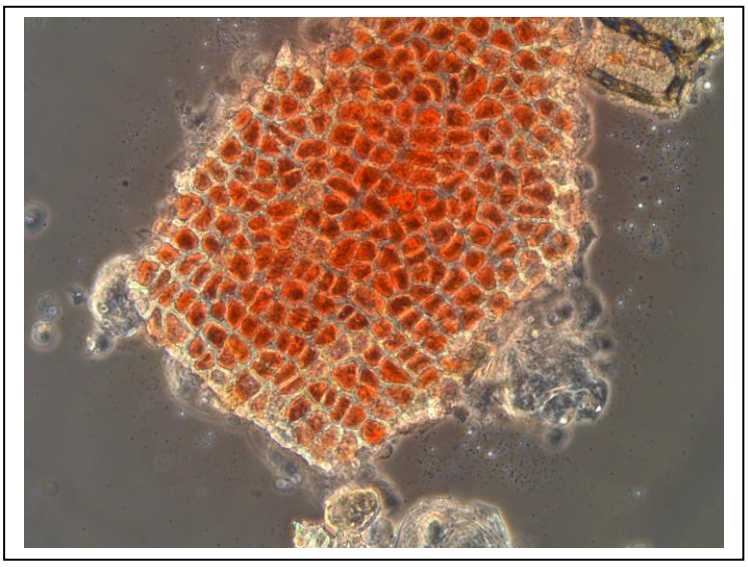
Digitally signed by Elizabeth Hughes
Date: 2020.06.10 13:15:19 -06'00'

MACROSCOPY

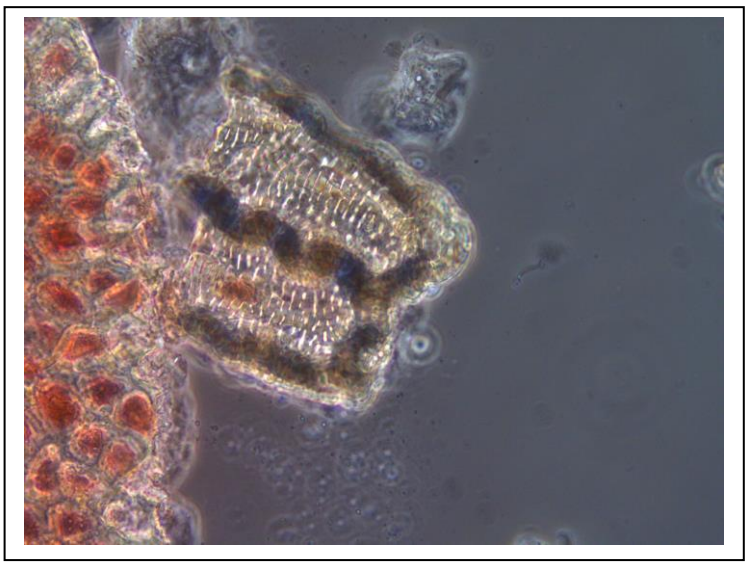
(1)

MICROSCOPY

(1)



(2)

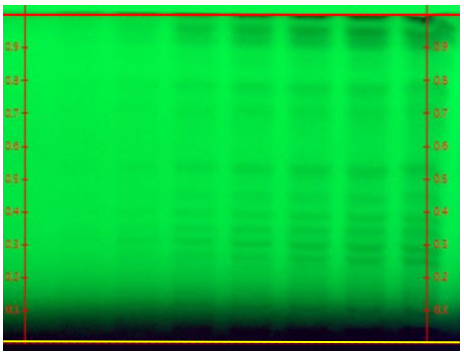


HP-TLC CONDITIONS

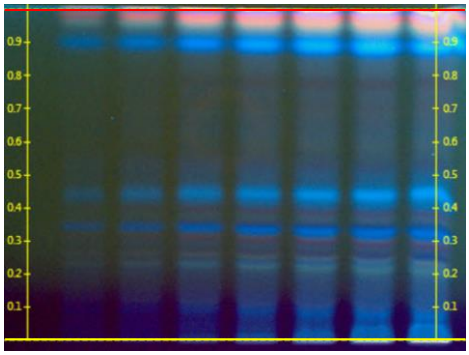
STATIONARY PHASE	Silica gel 60, F_{254}, 10 x 10 cm HP-TLC plates
SAMPLE PREPARATION	~0.5 g + 5 mL methanol, sonicated in hot water bath for ~10 minutes.
MOBILE PHASE	Ethyl acetate/ formic acid/ acetic acid/ Milli-Q water [10/1.1/1.1/2.6]
CHAMBER TEMPERATURE	Ambient
DETECTION	(1) UV 254 nm (2) UV 366 nm (3) Natural Products reagent → UV 366 nm

HP-TLC PLATES

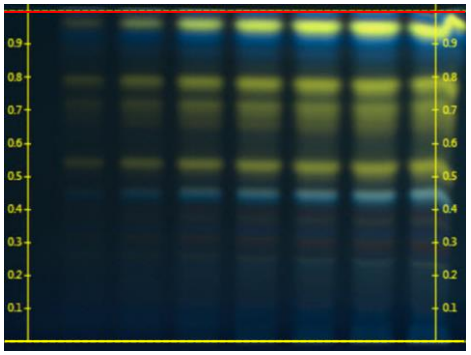
UV 254 nm



UV 366 nm



Natural products reagent → UV 366 nm



YELLOW LINE = SAMPLE ORIGIN
RED LINE = SOLVENT FRONT @ 70 mm

HP-TLC LANE APPLICATIONS

Lane	ID	Lane	ID
1	MeOH blank 2.0 µL	**5**	*Vaccinium macrocarpon* 6.0 µL
2	*Vaccinium macrocarpon* 1.0 µL	**6**	*Vaccinium macrocarpon* 8.0 µL
3	*Vaccinium macrocarpon* 2.0 µL	**7**	*Vaccinium macrocarpon* 10.0 µL
4	*Vaccinium macrocarpon* 4.0 µL	**8**	*Vaccinium macrocarpon* 12.0 µL

REVISION HISTORY

Revision History	Date of Revision	Document/Changes
00	09/15/2011	New report
01	03/07/2016	Passed re-evaluation; updated expiration date; general template update; updated detection; updated TLC pictures; added revision history
02	06/10/2020	Material passed reevaluation by HPTLC. Updated template, expiration date, TLC conditions, plate images, and lane applications.