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ABSTRACTS AND INVITED PRESENTATIONS

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Proximate composition of raw and boiled sweet potatoes (Ipomea batata) cultivars

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Sweet potato (Ipomoea batatas L.) root is an underutilized low cost tuber, which is available throughout the year. This study aims to make available the data on proximate composition of raw and boiled sweet potato varieties, Ama, Wariyapola Red, Wariyapola White, Shanthi and CARI 09 consumed by Sri Lankans. Moisture, ash, crude protein, crude fat and dietary fiber (soluble/insoluble) were analysed by standard methods. Carbohydrates were calculated by the difference.

Proximate composition of sweet potato varieties (dry weight) (mean± SD)

Variety Ama Roiled		%	% %	Carbo hydrate %	Protein %	Fat %	Oretary Fiber (DF)%	
							Insolu ble	Solubi
	Boiled	5.5±1.4	4.8± 0.1	76.0± 0.0	1.7±0.1	2.6±	11.1±0	e 3.8±
	Raw	5.2±0.4	2.61	81.5±	1.8±0.2	0.3 3.1±	7.1±	8.0 3.9±
Wariyapolu Red (WR)	Boiled	7.3±0.3	3.5±	77 1±	1.7±0.1	0.5 4.4±	9.7	0.0
	Raw	6.0±0.1	0.1 4.0±	77.2±	2.2±0.2	0.5	0.0	3.6± 0.0
Wariyapola White (WW)	Boiled	5.0±1.8	0.1 2.4±	0.0		6.0± 0.5	6.7± 0.0	4.44
	Raw	The same of	0.7	79.9± 0.0	2.6± 0.1	3.9± 0.5	B.7±	2.6±
		6.8±0.3*	4.1± 0.1*	74.41	2.84	6.2±	0.0 8.8±	0.0 3.7±
Shanthi	Boiled	5.8±1.2	2.5±	82.0±	0.2°	0.4° 4.5±	0.0 7.8±	0.0
	Raw	4.3±0.4	0.3 3.0±	82.1±	2.3±0.0	0.4	0.0	0.0
In each cold	Boiled	6.7±0,2	0.2 3.9±	79.5±		3.9± 0.6	0.0	2.3± 0.0
	Raw	2.2±0.1	0.4	0.0	1.2±0.0	3.3± 0.3	9.11	3.0±
	1	THE PERSON NAMED IN	4.0 ±0.3	78.3	2.0±0.1	5 44		0.0 3.0±

*for boiled and " for raw indicate significant differences at P < 0.05

The moisture content of boiled WR was significantly high (p=000) compared to other varieties. An increase in moisture content was observed in all varieties except WW following boiling indicating increased water absorption capacity specially in CARI 09 (4.5%) following cooking. The ash content of boiled varieties varied between 2.4-4.8% with Ama having a significantly high (p=0.001) ash content. A reduction in protein was seen in all varieties following boiling with the highest reduction in Shanthi. However, WW had significantly (p=0.001) high protein in both the raw and boiled tubers. The fat content of boiled varieties were 2.6-4.5% with 3.1-6.2% in raw tubers. Shanthi and WR had significantly high (p=0.001) content of fat. Carbohydrate was the major macronutrient present in all tubers with over 70% of total weight in boiled and raw (p>0.05). The total dietary fiber (TDF) content of boiled tubers varied between 10.2-14.9 % with 8.7-12.5% in raw. No significant difference was observed among varieties for both soluble and insoluble DF content but all varieties contained more than 10% TDF in boiled tubers.

Key phrases: Ama, CARI 09, Shanthi, Wariyapola Red, Wariyapola White