Supplementary Material

Table S1.Qualitative profile of phytoprostanes in terms of their occurrence and distribution in plant physiological part, fruits and processed plant foods.

Plant /Food Sample	$9\text{-}F_{1t}$-PhytoP	$9\text{-}epi\text{-}9\text{-}F_{1t}$-PhytoP	$9\text{-}D_{1t}$-PhytoP	$9\text{-}epi\text{-}9\text{-}D_{1t}$-PhytoP	$9\text{-}L_1$-PhytoP	$16\text{-}B_1$-PhytoP	$ent\text{-}16\text{-}F_{1t}$-PhytoP + $ent\text{-}16\text{-}epi\text{-}16\text{-}F_{1t}$-PhytoP	Reference
Plant Physiological Parts								
Wheat leaves	✓	✓					✓	**this study**
Cucumis melo L. leaves	✓	✓			✓	✓	✓	[42]
Date tree leaves	✓	✓	✓	✓	✓	✓		[43,44]
Chilean hazelnut (Gevuina avellana Mol., Proteaceae) cotyledons	✓	✓	✓	✓		✓	✓	[47]
Macroalgae	✓	✓			✓	✓		[45]
Brown macroalgae (Ectocarpus siliculosus)	✓	✓			✓	✓	✓	[46]
Brown macroalgae (Laminaria digitate)	✓	✓			✓	✓	✓	[46]
Brown macroalgae (Fucus spiralis)	✓	✓			✓	✓	✓	[46]
Red macroalgae (Osmundea pinnatifida)	✓	✓					✓	[46]
Red macroalgae (Grateloupia turuturu)	✓	✓					✓	[46]
Brown macroalgae (Pelvetia canaliculata)	✓	✓			✓	✓	✓	[46]
Passiflora edulis Sims shell	✓	✓	✓	✓	✓	✓		[18]
Passiflora tripartita var.mollisima shell	✓	✓	✓	✓	✓	✓	✓	[48]

Physalis peruviana calyx	✓	✓	✓	✓	✓	✓	✓	[49]
Date tree skin	✓	✓	✓	✓	✓	✓	✓	[43,44]
Date tree pits	✓	✓	✓	✓	✓	✓	✓	[43,44]
Date tree pulp	✓	✓	✓	✓	✓	✓	✓	[43,44]
Date tree cluster	✓	✓	✓	✓	✓	✓	✓	[43,44]
Date tree pollen	✓	✓	✓	✓	✓	✓	✓	[43,44]
Cocoa pod husk	✓	✓			✓	✓	✓	[52]
Cocoa husk	✓	✓			✓	✓	✓	[52]
Fruits and seeds								
Olive fruit	✓	✓			✓	✓		[36]
Almond kernel	✓	✓	✓	✓	✓	✓	✓	[22,29]
Walnut kernel	✓	✓			✓	✓		[28]
Pecan kernel	✓	✓			✓	✓	✓	[28]
Rice grain	✓	✓	✓	✓	✓	✓	✓	[23]
Pistachio kernel	✓	✓	✓	✓	✓	✓	✓	[20]
Macadamia kernel	✓	✓			✓	✓	✓	[28]
Cocoa bean	✓	✓	✓	✓	✓	✓	✓	[53]
Pea (Pisum sativumL.) seed	✓	✓	✓	✓	✓	✓	✓	[38,51]
French beans (Phaseolus vulgarisL. seed	✓	✓	✓	✓	✓	✓	✓	[51]
Mangetout (Pisum sativumL. Ssp.arvense) seed	✓	✓	✓	✓	✓	✓	✓	[51]
Coffee pulp	✓	✓			✓	✓	✓	[52]
Processed Plant Foods								
Extra virgin olive oil	✓	✓	✓	✓	✓	✓	✓	[21,31,35]
Olive oil			✓	✓			✓	[31,32]
Argan oil	✓	✓			✓			[32]
Sesame oil	✓				✓		✓	[32]
Grapefruit oil	✓	✓			✓			[32]
Safflower oil	✓				✓		✓	[32]
Palm oil					✓			[32]
Sunflower oil	✓	✓	✓	✓	✓	✓	✓	[31]
Olive (treated flesh)	✓	✓						[36]
Macadamia kernel fried	✓	✓	✓	✓	✓	✓	✓	[28]
Pecan kernel fried	✓	✓			✓	✓	✓	[28]
Grape must	✓		✓	✓			✓	[33]
Wine	✓		✓	✓	✓	✓	✓	[33]
Dark chocolate	✓	✓	✓	✓	✓	✓	✓	[54]
Sea buckthorn juice	✓	✓	✓	✓	✓	✓	✓	[34]

Table S2: Qualitative profile of phytofurans in terms of their occurrence and distribution in plant physiological part, fruits and processed plant foods.

Plant/Food Sample	ent-16(RS)-9-epi-ST-Δ^{14}-10-PhytoF	ent-9(RS)-12-epi-ST-Δ^{10}-13-PhytoF	ent-16(RS)-13-epi-ST-Δ^{14}-9-PhytoF	Reference
Plant Physiological Parts				
Wheat leaves	✔	✔	✔	**this study**
Cucumis melo L. leaves	✔	✔		[42]
Date tree leaves	✔	✔	✔	[43,44]
Chilean hazelnut (Gevuina avellana Mol., Proteaceae) cotyledons	✔	✔	✔	[47]
Brown macroalgae (Ectocarpus siliculosus)	✔	✔	✔	[46]
Brown macroalgae (Laminaria digitate)	✔	✔	✔	[46]
Brown macroalgae (Pelvetia canaliculata)	✔			[46]
Red macroalgae (Osmundea pinnatifida)			✔	[6]
Red macroalgae (Grateloupia turuturu)	✔		✔	[46]
Brown macroalage (Fucus spiralis)	✔	✔	✔	[46]
Date tree skin	✔	✔	✔	[43]
Date tree pits	✔	✔	✔	[43]
Date tree pulp	✔	✔	✔	[43]
Date tree cluster	✔	✔	✔	[43]
Date tree pollen	✔	✔	✔	[43]
Cocoa pod husk	✔	✔	✔	[52]
Cocoa husk	✔	✔	✔	[52]
Fruits and seeds				
Flax seeds			✔	[19]
Chia seeds			✔	[19]
Cocoa bean	✔	✔	✔	[53]
Pea (Pisum sativumL.)	✔	✔	✔	[38,51]

French beans (Phaseolus vulgarisL.	✓	✓	✓	[51]
Mangetout (Pisum sativumL. Ssp.arvense)	✓	✓	✓	[51]
Rice	✓	✓	✓	[37,50]
Almond	✓	✓	✓	[22]
Pistachio kernels	✓	✓	✓	[20]
Coffee pulp	✓	✓	✓	[52]
Processed Plant Foods				
Extra virgin olive oil	✓	✓	✓	[32]
Flax oil	✓	✓	✓	[32]
Argan oil			✓	[32]
Sesame oil			✓	[32]
Grapeseed oil		✓	✓	[32]
Safflower oil			✓	[32]
Palm oil		✓	✓	[32]
Dark chocolate	✓		✓	[54]
Sea buckthorn juice		✓		[34]