

**Table S1.** List of secretory structures found in Rhamanaceae (excluding the nectaries), showing the compounds and organ of occurrence. Data extracted from the literature and from the present study (species in bold). \* The mucilaginous ducts, when present in the leaves, always occur in the collenchyma of the veins, except in *Maesopsis*, where they also occur in the phloem.

Tribe	Species	Secretory structure	Compounds	Organ	References
	<i>Alphitonia sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage	Leaf (blade, petiole)	12, 13
	<i>Alphitonia excelsa</i>	Epidermis, ducts, osmophores	Mucilage, terpenes	Flower, leaf (blade)	10, 24
	<i>Ceanothus sp.</i>	Glandular leaf-teeth, Epidermis, hypodermis, idioblasts, colleters	Mucilage, tannins	Flower, leaf (blade, petiole)	12, 13, 46, 73
	<i>Ceanothus americanus</i>	Idioblasts	Mucilage	Leaf (blade, petiole), stem	74
	<i>Ceanothus buxifolius</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Incertae sedis</i>	<i>Ceanothus caeruleus</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Ceanothus cordulatus</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Ceanothus crassifolius</i>	Epidermis; hypodermis	Mucilage, tannins	Leaf (blade)	10, 12
	<i>Ceanothus cuneatus</i>	Epidermis	Mucilage	Leaf (blade)	10
	<i>Ceanothus dentatus</i>	Glandular leaf-teeth (trichomes)	Lipids, flavonoids	Leaf (blade)	60
	<i>Ceanothus foliosus</i>	Glandular leaf-teeth (trichomes)	Lipids, flavonoids	Leaf (blade)	60
	<i>Ceanothus hearstiorum</i>	Glandular leaf-teeth (trichomes)	Lipids, flavonoids	Leaf (blade)	60

<i>Ceanothus herbaceus</i>	Idioblasts	Mucilage	Leaf (blade, petiole), stem	74
<i>Ceanothus impressus</i>	Glandular leaf-teeth (trichomes)	Lipids, flavonoids	Leaf (blade)	60
<i>Ceanothus integerrimus</i>	Epidermis	Mucilage	Leaf (blade)	10
<i>Ceanothus oliganthus</i>	Glandular leaf-teeth (trichomes); epidermis	Mucilage, lipids, flavonoids	Leaf (blade)	10, 60
<i>Ceanothus oliganthus subsp. sorediatus</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Ceanothus papillosus</i>	Glandular leaf-teeth (trichomes), idioblasts	Mucilage, lipids, flavonoids	Leaf (blade)	10, 12, 60
<i>Ceanothus prostratus</i>	Epidermis	Mucilage	Leaf (blade)	10
<i>Ceanothus sanguineus</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Ceanothus x veitchianus</i>	Glandular leaf-teeth (trichomes)	Lipids, flavonoids	Leaf (blade)	60
<i>Ceanothus velutinus</i>	Glandular leaf-teeth (trichomes)	Lipids, flavonoids	Leaf (blade)	12, 60
<i>Colubrina sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	10, 12, 13
<i>Colubrina arborescens</i>	Idioblasts, ducts	Mucilage	Leaf (blade)	10
<i>Colubrina asiatica</i>	Idioblasts, cavities	Tannins	Leaf (petiole)	12
<i>Colubrina glandulosa</i>	Colleters, idioblasts	Mucilage, phenols, terpens	Flower	Present study

<i>Colubrina greggii</i>	Ducts	Mucilage	Leaf (blade)	10
<i>Colubrina heteroneura</i>	Epidermis, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Colubrina obscura</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Colubrina spinosa</i>	Epidermis, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Colubrina triflora</i>	Ducts	Mucilage	Leaf (blade)	10
<i>Emmenosperma sp.</i>	Epidermis, idioblasts, cavities	Mucilage	Leaf (blade, petiole)	13
<i>Emmenosperma alphonoides</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Lasiodiscus sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage	Leaf (blade, petiole)	12, 13
<i>Lasiodiscus manni</i>	Epidermis, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Adolphia infesta</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	75
<i>Colletia sp.</i>	Epidermis, idioblasts	Mucilage	Leaf (blade)	13
<i>Colletia hystrix</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	75
<i>Colletia paradoxa</i>	Idioblasts, osmophores	Mucilage, terpenes	Flower	24
<i>Discaria sp.</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	12, 13, 15
<i>Discaria americana</i>	Epidermis, idioblasts, osmophores	Mucilage, tannins, terpenes	Flower, leaf (blade)	10, 24

<i>Discaria chacaya</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	10, 12	
<i>Discaria pubescens</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	10	
<i>Discaria</i> × <i>serratifolia</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	10, 12	
<i>Kentrothamnus weddellianus</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10, 14	
<i>Ochetophila nana</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	10	
<i>Ochetophila trinervis</i>	Idioblasts	Mucilage, tannins	Leaf (blade)	10	
<i>Retanilla ephedra</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	16	
<i>Retanilla patagonica</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	16	
<i>Retanilla stricta</i>	Hypodermis, idioblasts	Mucilage, tannins	Leaf (blade)	16	
<i>Retanilla trinervia</i>	Epidermis	Mucilage	Leaf (blade)	10, 16	
<i>Trevoa</i> sp.	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	12, 13, 15	
<i>Trevoa quinquenervia</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10, 76	
<i>Gouanieae</i>	<i>Crumenaria</i> sp.	Epidermis, idioblasts	Mucilage	Leaf (blade)	12, 13
	<i>Crumenaria decumbens</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Crumenaria erecta</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Gouania</i> sp.	Epidermis, idioblasts, cavities, ducts	Mucilage	Leaf (blade, petiole)	12, 13

<i>Gouania blanchetiana</i>	Ducts	Mucilage	Leaf (blade)	10
<i>Gouania cornifolia</i>	Epidermis	Mucilage	Leaf (blade)	10
<i>Gouania corylifolia</i>	Idioblasts	Mucilage	Leaf (blade)	10
<i>Gouania discolor</i>	Epidermis	Mucilage	Leaf (blade)	10
<i>Gouania inornata</i>	Epidermis	Mucilage	Leaf (blade)	10
<b><i>Gouania latifolia</i></b>				
<b><i>G. virgata</i></b>	Colleters, idioblasts	Mucilage, phenols	Flower	Present study
<i>Gouania leptostachya</i>	Ducts	Mucilage	Leaf (blade)	10
<i>Gouania longipetala</i>	Epidermis, ducts	Mucilage	Leaf (blade)	10
<i>Gouania lupuloides</i>	Epidermis, ducts	Mucilage	Leaf (blade)	10
<i>Gouania microcarpa</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	10, 20
<i>Gouania napalensis</i>	Ducts	Mucilage	Leaf (blade)	10
<i>Gouania nematostachya</i>	Epidermis, ducts	Mucilage	Leaf (blade)	10
<i>Gouania polygama</i>	Idioblasts, ducts	Mucilage	Leaf (blade)	10
<i>Gouania pyrifolia</i>	Ducts	Mucilage	Leaf (blade)	10
<i>Gouania riparia</i>	Epidermis, ducts	Mucilage	Leaf (blade)	10
<i>Gouania tiliifolia</i>	Epidermis, ducts	Mucilage	Leaf (blade)	10

	<i>Gouania tiliifolia</i> subsp. <i>glandulosa</i>	Ducts	Mucilage	Leaf (blade)	10
	<i>Gouania urticifolia</i>	Ducts	Mucilage	Leaf (blade)	10
	<i>Helinus brevipes</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Helinus integrifolius</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Helinus lanceolatus</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Helinus mystacinus</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Helinus spartioides</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Reissekia</i> sp.	Epidermis, idioblasts	Mucilage	Leaf (blade)	12, 13
	<i>Reissekia cordifolia</i>	Idioblasts	Tannins	Leaf (blade)	10
<i>Maesopsidae</i>	<i>Maesopsis</i> sp.	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	12, 13
	<i>Maesopsis eminii</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade, phloem*)	11, 12
<i>Paliureae</i>	<i>Hovenia</i> sp.	Epidermis, idioblasts, cavities, ducts	Mucilage	Leaf (blade, petiole)	12, 13
	<b><i>Hovenia dulcis</i></b>	Colleters, idioblasts, ducts, food bodies, osmophores	Mucilage, phenols, tannins, lipids, terpenes	Flower, leaf (blade)	Present study, 10, 24, 77
	<i>Paliurus</i> sp.	Epidermis, idioblasts, cavities, ducts	Mucilage	Flower, leaf (blade, petiole)	12, 13, 73

<i>Paliurus ramosissimus</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Paliurus spina-christi</i>	Epidermis, idioblasts, ducts, osmophores	Mucilage, tannins, terpenes	Flower, leaf (blade, petiole), stem	11, 12, 24, 78
<i>Sarcomphalus crenatus</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Sarcomphalus domingensis</i>	Idioblasts	Tannins	Leaf (blade)	11
<b><i>Sarcomphalus joazeiro</i></b>	Colleters, idioblasts	Mucilage, phenols, tannins, saponins, steroids, triterpenes	Flower, stem (bark)	Present study, 79
<i>Sarcomphalus laurinus</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Sarcomphalus mistol</i>	Idioblasts, cavities, ducts	Mucilage, tannins, saponins	Leaf (blade, petiole)	11, 80
<i>Sarcomphalus obtusifolius</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11
<i>Sarcomphalus platyphyllus</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Sarcomphalus reticulatus</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Ziziphus sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	12, 13
<i>Ziziphus abyssinica</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus apetala</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus calophylla</i>	Ducts	Mucilage	Leaf (blade), stem	11, 12
<i>Ziziphus cotinifolia</i>	Idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11

<i>Ziziphus elegans</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus funiculosa</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus glabrata</i>	Idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	11, 20
<i>Ziziphus horsfieldii</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus incurva</i>	Ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus javanensis</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus jujuba</i>	Epidermis, idioblasts, cavities, ducts, osmophores	Mucilage, tannins, terpenes	Flower, leaf (blade, petiole), stem	11, 17, 20, 21, 24
<i>Ziziphus linnaei</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
<i>Ziziphus lotus</i>	Epidermis, ducts	Mucilage	Flower, leaf (blade), stem	11, 81
<i>Ziziphus mauritiana</i>	Epidermis, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Ziziphus mistol</i>	Idioblasts, osmophores	Mucilage, terpenes	Flower	24
<i>Ziziphus mucronata</i>	Epidermis, idioblasts, ducts, osmophores	Mucilage, terpenes	Flower, leaf (blade)	11, 24
<i>Ziziphus nummularia</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole), stem	11, 17, 20
<i>Ziziphus oenopolia</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	11, 12, 20
<i>Ziziphus oxyphylla</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11

	<i>Ziziphus rugosa</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	11, 20
	<i>Ziziphus spina-christi</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
	<i>Ziziphus trinervis</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
	<i>Ziziphus xylopyrus</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	11, 20
	<i>Ziziphus zeyheriana</i>	Epidermis, ducts	Mucilage	Leaf (blade)	11
	<i>Noltea africana</i>	Gladular leaf-teeth, idioblasts	Tannins	Leaf (blade)	10, 12, 13
	<i>Phylica cylindrica</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Phylica nitida</i>	Gladular leaf-teeth	?	Leaf (blade)	12, 13
<i>Phyliceae</i>	<i>Phylica pinea</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Phylica pubescens</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Phylica rigida</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Phylica rosmarinifolia</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Cryptandra sp.</i>	Epidermis, idioblasts	Mucilage	Leaf (blade)	12, 13
<i>Pomaderreae</i>	<i>Cryptandra amara</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Cryptandra arbutiflora</i>	Epidermis	Mucilage	Leaf (blade)	10

<i>Cryptandra arbutiflora</i> var. <i>tubulosa</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Cryptandra australis</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Cryptandra leucopogon</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Cryptandra mutila</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Cryptandra parvifolia</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Cryptandra scoparia</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Cryptandra spinescens</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Cryptandra tomentosa</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Pomaderris</i> sp.	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	12, 13
<i>Pomaderris andromedifolia</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11, 12
<i>Pomaderris apetala</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade, petiole)	10, 20
<i>Pomaderris discolor</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10, 12
<i>Pomaderris elliptica</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
<i>Pomaderris lanigera</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10, 12
<i>Pomaderris ligustrina</i>	Idioblasts	Tannins	Leaf (blade)	10
<i>Pomaderris phyllicifolia</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10

	<i>Pomaderris prunifolia</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Pomaderris racemosa</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Pomaderris wendlandiana</i>	Idioblasts	Tannins	Leaf (blade)	10, 12
	<i>Spyridium coactilifolium</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Spyridium eriocephalum</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Spyridium globulosum</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Spyridium gunnii</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Spyridium majoranifolium</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Spyridium obcordatum</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10
	<i>Spyridium obovatum</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	10, 12
	<i>Spyridium ulicinum</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Spyridium vexilliferum</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Trymalium sp.</i>	Epidermis, idioblasts	Mucilage	Leaf (blade)	12, 13
	<i>Trymalium ledifolium</i>	Idioblasts	Tannins	Leaf (blade)	10
	<i>Trymalium odoratissimum</i>	Idioblasts	Tannins	Leaf (blade)	10
<i>Rhamneae</i>	<i>Auerodendron reticulatum</i>	Idioblasts, cavities, ducts	Mucilage, tannins, resin	Leaf (blade)	11, 12

<i>Auerodendron northropianum</i>	Idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Berchemia sp.</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade, petiole)	12, 13
<i>Berchemia discolor</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11, 12
<i>Berchemia floribunda</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11
<i>Berchemia lineata</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11
<i>Berchemia scandens</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11
<i>Condalia sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	12, 13, 15
<i>Condalia buxifolia</i>	Idioblasts, osmophores	Mucilage, terpenes	Flower	24
<i>Condalia ericoides</i>	Hypodermis	Mucilage	Leaf (blade)	11, 12
<i>Condalia hookeri</i>	Idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Condalia mexicana</i>	Hypodermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11, 12
<i>Condalia microphylla</i>	Hypodermis, idioblasts	Mucilage, tannins	Leaf (blade)	11, 12
<i>Frangula sp.</i>	Ducts	Mucilage	Leaf (blade), stem	12
<i>Frangula alnus</i>	Epidermis, idioblasts, cavities, ducts,	Mucilage, tannins	Flower, fruit, leaf (blade, petiole), stem	10, 11, 12, 13, 19, 82, 83, 84, 85
<i>Frangula azorica</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade), stem	11, 86

<i>Frangula californica</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Flower, fruit, leaf, stem	11, 13, 82
<i>Frangula capreifolia</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Frangula caroliniana</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Frangula crenata</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Frangula grandifolia</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Frangula microphylla</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Frangula palmeri</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Frangula purshiana</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade), stem	11, 13, 83
<i>Frangula rupestris</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, flavonoids, tannins	Leaf (blade, petiole), stem	10, 11, 22
<i>Frangula sphaerosperma</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Karwinskia sp.</i>	Cavities, ducts	Mucilage, resin	Leaf (petiole)	12, 13
<i>Karwinskia humboldtiana</i>	Cavities, ducts	Mucilage, resin	Leaf (blade)	11, 12
<i>Karwinskia sessilifolia</i>	Cavities, ducts	Mucilage, resin	Leaf (blade)	11
<i>Krugiodendron sp.</i>	Idioblasts	Tannins	Leaf (blade)	12, 13

<i>Krugiodendron ferreum</i>	Epidermis, idioblasts	Tannins	Leaf (blade)	11
<i>Pseudoziziphus parryi</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11
<i>Reynosia sp.</i>	Epidermis, idioblasts	Mucilage	Leaf (blade)	12, 13
<i>Reynosia barbatula</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia domingensis</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia guama</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia jamaicensis</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia krugii</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia moaensis</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia regia</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia retusa</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Reynosia revoluta</i>	Hypodermis, idioblasts, ducts	Mucilage, resin	Flower, leaf (blade)	11, 12, 23
<i>Reynosia uncinata</i>	Idioblasts	Mucilage	Flower	23
<i>Reynosia wrightii</i>	Epidermis, idioblasts	Mucilage, tannins	Flower, leaf (blade)	11, 23
<i>Rhamnella sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage, tannins	Leaf (blade, petiole)	12, 13, 15
<i>Rhamnella franguloides</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade)	11, 12

<i>Rhamnella vitiensis</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Rhamnidium sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage	Leaf (blade, petiole)	12, 13
<b><i>Rhamnidium elaeocarpum</i></b>	Epidermis, idioblasts, cavities, ducts and colleters	Mucilage, phenols, terpens, lipids, resin, tannins	Flower, leaf (blade)	Present study, 11
<i>Rhamnidium glabrum</i>	Epidermis, cavities, ducts	Mucilage, resin, tannins	Leaf (blade)	11
<i>Rhamnus sp.</i>	Glandular leaf-teeth, idioblasts	Mucilage, tannins	Leaf (blade, petiole)	12, 13, 15
<i>Rhamnus alaternus</i>	Idioblasts	Tannins	Leaf (blade)	10, 11
<i>Rhamnus alnifolia</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus alpina</i>	Glandular leaf-teath, idioblasts	Tannins	Leaf (blade)	11, 12
<i>Rhamnus cathartica</i>	Idioblasts, osmophores	Tannins, terpenes	Flower, leaf (blade)	10, 12, 24
<i>Rhamnus cornifolia</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus costata</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus crocea</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus dauurica</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus diffusa</i>	Epidermis, ducts	Mucilage, tannins	Leaf (blade)	11
<i>Rhamnus erythroxylon</i>	Idioblasts	Tannins	Leaf (blade)	11

<i>Rhamnus infectoria</i>	Idioblasts	Tannins	Leaf (blade)	11, 12
<i>Rhamnus × intermedia</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus japonica</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus lanceolata</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus longifolia</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus lycioides subsp. oleoides</i>	Idioblasts	Tannins	Leaf (blade)	10, 11
<i>Rhamnus lycioides subsp. graeca</i>	Idioblasts	Tannins	Leaf (blade)	10, 11
<i>Rhamnus napalensis</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus oleoides</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus orbiculata</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus parvifolia</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus prinoides</i>	Idioblasts	Tannins	Leaf (blade)	10, 11
<i>Rhamnus pumila</i>	Idioblasts	Tannins	Leaf (blade)	10, 11
<i>Rhamnus purpurea</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus rhodopea</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus saxatilis</i>	Idioblasts	Tannins	Leaf (blade)	10, 11

<i>Rhamnus serrata</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus smithii</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus × spathulifolia</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus staddo</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus triquetra</i>	Idioblasts	Tannins	Leaf (blade)	11
<i>Rhamnus wightii</i>	Idioblasts, cavities	Tannins	Leaf (blade, petiole)	11, 20
<i>Sageretia sp.</i>	Epidermis, idioblasts, ducts	Mucilage	Leaf (blade)	12, 13
<i>Sageretia brandrethiana</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Sageretia elegans</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Sageretia filiformis</i>	Idioblasts, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Sageretia hamosa</i>	Idioblasts, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Sageretia minutiflora</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	10
<i>Sageretia thea</i>	Glandular leaf-teath, epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	10, 11
<i>Sageretia wrightii</i>	Idioblasts	Tannins	Leaf (blade)	10
<i>Scutia sp.</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade)	12, 13

	<i>Scutia buxifolia</i>	Osmophores	Terpenes	Flower	24
	<i>Scutia myrtina</i>	Epidermis, idioblasts, ducts	Mucilage, tannins	Leaf (blade, petiole)	10, 12, 20
	<i>Smythea bombaiensis</i>	Epidermis, idioblasts	Mucilage, tannins	Leaf (blade, petiole)	11, 20
	<i>Smythea calpicarpa</i>	Idioblasts	Tannins	Leaf (blade)	11
	<i>Smythea lanceata</i>	Idioblasts	Tannins	Leaf (blade)	11
	<i>Smythea macrocarpa</i>	Idioblasts	Tannins	Leaf (blade)	11
Ventilagineae	<i>Ventilago sp.</i>	Epidermis, idioblasts, cavities, ducts	Mucilage	Leaf (blade, petiole)	12, 13
	<i>Ventilago denticulata</i>	Idioblasts	Tannins	Leaf (petiole)	20
	<i>Ventilago leiocarpa</i>	Epidermis, idioblasts, ducts	Mucilage, taninns	Leaf (petiole)	11
	<i>Ventilago madraspatana</i>	Epidermis, idioblasts, ducts	Mucilage, taninns	Leaf (blade), stem	11, 12

## ReferenceReferences

1. The Angiosperm Phylogeny Group; Chase, M.W.; Christenhusz, M.J.M.; Fay, M.F.; Byng, J.W.; Judd, W.S.; Soltis, D.E.; Mabberley, D.J.; Sennikov, A.N.; Soltis, P.S.; Stevens, P.F. An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV. *Bot. J. Linn. Soc.* **2016**, *181*, 1–20.
2. Rhamnaceae in Flora do Brasil 2020 em Construção. Jardim Botânico do Rio de Janeiro. Available online: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB207> (accessed on 9 October 2020).
3. Medan, D. Reproductive phenology, pollination biology, and gynoecium development in *Discaria americana* (Rhamnaceae). *N. Z. J. Bot.* **1991**, *29*, 31–42.
4. Medan, D.; D'Ambrogio, A.C. Reproductive biology of the andromonoecious shrub *Trevoa quinquenervia* (Rhamnaceae). *Bot. J. Linn. Soc.* **1998**, *126*, 191–206.
5. Medan, D.; Arce, M.E. Reproductive biology of the Andean-disjunct genus *Retanilla* (Rhamnaceae). *Plant Syst. Evol.* **1999**, *218*, 281–298.
6. Medan, D.; Toretta, J.P. The reproduction of *Colletia hystrix* and late flowering in *Colletia* (Rhamnaceae: Colletieae). *Plant Syst. Evol.* **2014**, *301*, 1181–1189.
7. Cerino, M.C.; Richard, G.A.; Torretta, J.P.; Gutierrez, H.F.; Pensiero, J.F. Reproductive biology of *Ziziphus mistol* Griseb. (Rhamnaceae), a wild fruit tree of saline environments. *Flora Morphol. Distrib. Funct. Ecol. Plants* **2015**, *211*, 18–25.
8. Medan, D.; Agesen, L. Comparative flower and fruit structure in the Colletieae (Rhamnaceae). *Bot. Jahrb. Syst.* **1995**, *117*, 531–564.
9. Gotelli, M.M.; Galati, B.G.; Medan, D. Morphological and ultrastructural studies of floral nectaries in Rhamnaceae. *J. Torrey Bot. Soc.* **2017**, *144*, 63–73.

10. Gemoll, K. Anatomisch-systematische untersuchung des blattes der Rhamneen aus den trieben: Rhamneen, Colletieen und Gouanieen. *Beihefte Botanischen Centralblatt* **1902**, *12*, 351–424.
11. Herzog, T.H. Anatomisch-systematische untersuchung des blattes der Rhamneen aus den trieben: Ventilagineen, Zizyphneen und Rhamneen. *Beihefte Botanischen Centralblatt* **1903**, *15*, 95–207.
12. Solereder, H. *Systematic Anatomy of the Dicotyledons: A Handbook for Laboratories of Pure and Applied Botany*; Clarendon Press: Oxford, UK, 1908; Volumes 1 and 2, pp. 218–221, 885–889.
13. Metcalfe, C.R.; Chalk, L. *Anatomy of the Dicotyledons: Leaves, Stem and Wood in Relation to Taxonomy with Notes on Economic Uses*; Clarendon Press: Oxford, England, 1957; Volume 1, pp. 404–413.
14. Medan, D. Anatomia foliar de *Kentrothamnus* (Rhamnaceae). *Bol. Soc. Argent. Bot.* **1974**, *16*, 83–88.
15. Gregory, M.; Baas, P. A survey of mucilage cells in vegetative organs of the dicotyledons. *Isr. J. Plant Sci.* **1989**, *38*, 125–174.
16. Mantese, A.; Medan, D. Anatomia y arquitectura foliares de *Retanilla* (Rhamnaceae). *Darwiniana* **1992**, *31*, 253–259.
17. Clifford, S.C.; Arndt, S.K.; Popp, M.; Jones, H.G. Mucilages and polysaccharides in *Ziziphus* species (Rhamnaceae): Localization, composition and physiological roles during drought-stress. *J. Exp. Bot.* **2002**, *53*, 131–138.
18. Medan, D.; Schirarend, C. Rhamnaceae. In *Flowering Plants: Dicotyledons*; Kubitzki, K., Ed.; Springer-Verlag: Berlin/Heidelberg, Germany, 2004; pp. 320–338.
19. Serdar, B.; Çoskunçelebi, K.; Terzioglu, S.; Hampe, A. Anatomical notes on Turkish *Frangula alnus* Mill. (Rhamnaceae). *Plant Biosyst.* **2007**, *141*, 69–74.
20. Shisode, S.B.; Patil, D.A. Petiolar anatomy in some Rhamnaceae. *Curr. Bot.* **2011**, *2*, 22–25.
21. Sivasankari, M.P.; Sankaravadiivo, A. Leaf anatomy of *Ziziphus mauritiana* Lam. *Int. J. Curr. Res. Biosci. Plant Biol.* **2017**, *4*, 73–79.
22. Arsenijević, J.; Drobac, M.; Slavkovska, V.; Kovačević, N.; Lakušić, B. Anatomical analysis and phytochemical screening of *Frangula rupestris* (Scop.) Schur (Rhamnaceae). *Bot. Serb.* **2018**, *42*, 231–239.
23. Schirarend, C.; Hoffmann, P. Untersuchungen zur blütenmorphologie der gattung *Reynosia* Griseb. (Rhamnaceae). *Flora* **1993**, *188*, 275–286.
24. Gotelli, M.M.; Galati, B.G.; Zarlavsky, G.; Nicolau, M.; Reposi, S. Localization, morphology, anatomy and ultrastructure of osmophores in species of Rhamnaceae. *Protoplasma* **2020**, *257*, 1109–1121.
25. Asgarpanah, J.; Haghghat, E. Phytochemistry and pharmacologic properties of *Ziziphus spina christi* (L.) Willd. *Afr. J. Pharm. Pharmacol.* **2012**, *6*, 2332–2339.
26. Abdel-Zaher, A.O.; Salim, S.Y.; Assaf, M.H.; Abdel-Hady, R.H. Antidiabetic activity and toxicity of *Zizyphus spina-christi* leaves. *J. Ethnopharmacol.* **2005**, *101*, 129–138.
27. Pawlowska, A.M.; Camangi, F.; Bader, A.; Braca, A. Flavonoids of *Zizyphus jujuba* L. and *Zizyphus spina-christi* (L.) Willd (Rhamnaceae) fruits. *Food Chem.* **2009**, *112*, 858–862.
28. Hyun, T.K.; Eom, S.H.; Yu, C.Y.; Roitsch, T. *Hovenia dulcis*—An Asian traditional herb. *Planta Med.* **2010**, *76*, 943–949.
29. Abalaka, M.E.; Mann, A.; Adeyemo, S.O. Studies on in-vitro antioxidant and free radical scavenging potential and phytochemical screening of leaves of *Ziziphus mauritiana* L. and *Ziziphus spina-christi* L. compared with ascorbic acid. *J. Med. Genet. Genom.* **2011**, *3*, 28–34.
30. Wang, M.; Jiang, C.; Ma, L.; Zhang, Z.; Cao, L.; Liu, J.; Zeng, X. Preparation, preliminary characterization and immunostimulatory activity of polysaccharide fractions from the peduncles of *Hovenia dulcis*. *Food Chem.* **2013**, *138*, 41–47.
31. Ashraf, A.; Sarfraz, R.A.; Anwar, F.; Shahid, S.A.; Alkharfy, K.M. Chemical composition and biological activities of leaves of *Ziziphus mauritiana* L. native to Pakistan. *Pak. J. Bot.* **2015**, *47*, 367–376.
32. Brito, S.M.O.; Coutinho, H.D.M.; Talvani, A.; Coronel, C.; Barbosa, A.G.R.; Vega, C.; Figueredo, F.; Tintino, S.; Lima, L.F.; Boligon, A.A.; et al. Analysis of bioactivities and chemical composition of *Ziziphus joazeiro* Mart. using HPLC–DAD. *Food Chem.* **2015**, *186*, 185–191.
33. Ji, X.; Peng, Q.; Yuan, Y.; Shen, J.; Xie, X.; Wang, M. Isolation, structures and bioactivities of the polysaccharides from jujube fruit (*Ziziphus jujuba* Mill.): A review. *Food Chem.* **2017**, *227*, 349–357.
34. Hussein, A.S. *Ziziphus spina-christi*: Analysis of bioactivities and chemical composition. In *Wild Fruits: Composition, Nutritional Value and Products*; Mariod, A.A., Ed.; Springer: Cham, Switzerland, 2019; pp. 175–197.
35. Yang, B.; Wu, Q.; Luo, Y.; Yang, Q.; Chen, G.; Wei, X.; Kan, J. Japanese grape (*Hovenia dulcis*) polysaccharides: New insight into extraction, characterization, rheological properties, and bioactivities. *Int. J. Biol. Macromol.* **2019**, *134*, 631–644.
36. Mahajan, R.T.; Chopda, M.Z. Phyto-pharmacology of *Ziziphus jujuba* Mill—A plant review. *Pharmacogn. Rev.* **2009**, *3*, 320–329.

37. Silva, L.A.; Sales, J.F.; Guimarães, R.M.; Oliveira, J.A.; Vasconcelos Filho, S.C. Morphological aspects of fruits, seeds and seedlings of *Rhammidium elaeocarpum* Reissek. *Semin. Cienc. Agrar.* **2015**, *36*, 1179–1190.
38. Fahn, A. *Secretory Tissues in Plants*; Academic Press: London, UK, 1979.
39. Evert, R.F. *Esau's Plant Anatomy—Meristems, Cells, and Tissues of the Plant Body: Their Structure, Function, and Development*, 3rd ed.; John Wiley & Sons Inc: Hoboken, NJ, USA, 2006.
40. Rudall, P.J. Laticifers in Euphorbiaceae—A conspectus. *Bot. J. Linn. Soc.* **1987**, *94*, 143–163.
41. Marinho, C.R.; Teixeira, S.P. Novel reports of laticifers in Moraceae and Urticaceae: Revisiting synapomorphies. *Plant Syst. Evol.* **2019**, *305*, 13–31.
42. Demarco, D. Floral glands in asclepiads: Structure, diversity and evolution. *Acta Bot. Bras.* **2017**, *31*, 477–502.
43. Marin, M.; Koko, V.; Duletić-Laušević, S.; Marin, P.D.; Rančić, D.; Dajic-Stevanovic, Z. Glandular trichomes on the leaves of *Rosmarinus officinalis*: Morphology, stereology and histochemistry. *S. Afr. J. Bot.* **2006**, *72*, 378–382.
44. Ciccarelli, D.; Garbari, F.; Pagni, A.M. The flower of *Myrtus communis* (Myrtaceae): Secretory structures, unicellular papillae, and their ecological role. *Flora* **2008**, *203*, 85–93.
45. Hauenschild, F.; Matuszak, S.; Muellner-Riehl, A.N.; Favre, A. Phylogenetic relationships within the cosmopolitan buckthorn family (Rhamnaceae) support the resurrection of *Sarcomphalus* and the description of *Pseudoziziphus* gen. nov. *TAXON* **2016**, *65*, 47–64.
46. Thomas, V. Structural, functional and phylogenetic aspects of the colleter. *Ann. Bot.* **1991**, *68*, 287–305.
47. Machado, A.F.P.; Souza, A.M.; Leitão, C.A.E. Secretory structures at syconia and flowers of *Ficus enormis* (Moraceae): A specialization at ostiolar bracts and the first report of inflorescence colleters. *Flora* **2013**, *208*, 45–51.
48. Foster, A.S. Plant idioblasts: Remarkable examples of cell specialization. *Protoplasma* **1956**, *46*, 184–193.
49. Schultz, J.C. Tannin-insect interactions. In *Chemistry and Significance of Condensed Tannins*; Hemingway, R.W., Karehesy, J.J., Eds.; Plenum Press: New York, NY, USA, 1989; pp. 417–433.
50. Peters, N.K.; Verma, D.P.S. Phenolic compounds as regulators of gene expression in plant-microbe interactions. *Mol. Plant Microbe Interact.* **1990**, *3*, 4–8.
51. Schlesinger, W.H. *Biogeochemistry: An Analysis of Global Change*; Academic Press: San Diego, CA, USA, 1991.
52. Appel, H.M. Phenolics in ecological interactions: The importance of oxidation. *J. Chem. Ecol.* **1993**, *19*, 1521–1552.
53. Castro, M.M.; Demarco, D. Phenolic compounds produced by secretory structures in plants: A brief review. *Nat. Prod. Commun.* **2008**, *3*, 1273–1284.
54. Leme, F.M.; Borella, P.H.; Marinho, C.R.; Teixeira, S.P. Expanding the laticifer knowledge in Cannabaceae: Distribution, morphology, origin, and latex composition. *Protoplasma* **2020**, *257*, 1183–1199.
55. Guignard, L.; Colin, H. Sur la présence de réservoirs a gomme chez les Rhamnées. *Bull. Soc. Bot. France* **1888**, *35*, 325–327.
56. Bouchet, P. Étude ultrastructurale des cellules constituant les poches “lysigènes” à mucilage de la bourdaine: *Rhamnus frangula* L. *C. R. Hebd. Séances Acad. Sci.* **1974**, *279*, 1073–1076.
57. Pool, A. New species, combinations, and lectotypifications in Neotropical and northern Mexican *Frangula* (Rhamnaceae). *Novon* **2013**, *22*, 447–467.
58. Wollenweber, E.; Dörr, M.; Bohm, B.A.; Roitman, J.N. Exudate flavonoids of eight species of *Ceanothus* (Rhamnaceae). *Z. Naturforsch.* **2004**, *59*, 459–462.
59. Sun, M.; Naeem, R.; Su, J.-X.; Cao, Z.-Y.; Burleigh, J.G.; Soltis, P.S.; Soltis, D.E.; Chen, Z.-D. Phylogeny of the Rosidae: A dense taxon sampling analysis. *J. Syst. Evol.* **2016**, *54*, 363–391.
60. Duffey, S.S.; Stout, M.J. Antinutritive and toxic components of plant defense against insects. *Arch. Insect Biochem. Physiol.* **1996**, *32*, 3–37.
61. Romeo, J.T.; Saunders, J.A.; Barbosa, P. *Phytochemical Diversity and Redundancy in Ecological Interactions*; Plenum Press: New York, NY, USA, 1996.
62. Agrawal, A.A.; Fishbein, M. Plant defense syndromes. *Ecology* **2006**, *87*, S132–S149.
63. POWO. Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. 2019. Available online: <http://www.plantsoftheworldonline.org/> (accessed on 10 November 2020).
64. Clark, G. *Staining Procedures*, 4th ed.; Williams & Wilkins: Baltimore, MD, USA, 1981.
65. Gerrits, P.O.; Horobin, R.W. *The Application of Glycol Methacrylate in Histotechnology; Some Fundamental Principles*; Faculteit der Geneeskunde, Rijksuniversiteit Groningen: Groningen, The Netherlands, 1991.
66. O'Brien, T.P.; Feder, N.; McCully, M.E. Polychromatic staining of plant cell walls by toluidine blue O. *Protoplasma* **1964**, *59*, 368–373.
67. Jensen, W.E. *Botanical Histochemistry: Principles and Practice*; W.H. Freeman & Co: San Francisco, CA, USA, 1962.
68. Pearse, A.G.E. *Histochemistry: Theoretical and Applied*. C. Livingstone: Edinburgh, UK, 1972.

69. David, R.; Carde, J. Coloration différentielle des inclusions lipidiques et terpeniques des pseudophylles du pin maritime au moyen du reactif Nadi. *C. R. Hebd. Seanc. Acad. Sci. Paris* **1964**, *258*, 1338–1340.
70. Karnovsky, M.J. A formaldehyde-glutaraldehyde fixative of high osmolarity for use in electron microscopy. *J. Cell Biol.* **1965**, *27*, 137–138.
71. Matthews, M.L.; Endress, P.K. Floral structure and systematics in four orders of rosids, including a broad survey of floral mucilage cells. *Plant Syst. Evol.* **2006**, *260*, 199–221.
72. Holm, T. *Ceanothus americanus* L. and *ovatus* Desf.; a morphological and anatomical study. *Am. J. Sci.* **1906**, *22*, 523–530.
73. Mantese, A.; Medan, D. Anatomia y arquitectura foliares de *Colletia* y *Adolphia* (Rhamnaceae). *Darwiniana* **1993**, *32*, 91–97.
74. Medan, D.; Mantese, A. Contribución a la anatomía y arquitectura foliares de *Talguenea* (Rhamnaceae). *Kurtziana* **1989**, *20*, 95–100.
75. Buono, R.A.; Oliveira, A.B.; Paiva, E.A.S. Anatomy, ultrastructure and chemical composition of food bodies of *Hovenia dulcis* (Rhamnaceae). *Ann. Bot.* **2008**, *101*, 1341–1348.
76. Shahbaz, S.E.; Shareef, N.M. Use of morphological and anatomical characters to delimit varieties of *Paliurus spina-christi* Mill. (Rhamnaceae). *Innovaciencia* **2018**, *6*, 1–14.
77. Nascimento, A.M.; Torres, J.C.; Marques, C.A. Caracterização morfo-anatômica e testes fitoquímicos em amostras comerciais de *Ziziphus joazeiro* Mart. (Rhamnaceae). *Rev. Fitos* **2016**, *10*, 375–547.
78. Colares, M.N.; Arambarri, A.M. *Ziziphus mistol* (Rhamnaceae): Morfo-anatomía y arquitectura foliar. *Lat. Am. J. Pharm.* **2008**, *27*, 568–577.
79. Nasri-Ayachi, M.B.; Nabli, M.A. Floral biology study of *Ziziphus lotus* L. *Acta Hortic.* **2009**, *840*, 337–342.
80. Hasler, O. Entwicklungsgeschichte und Vergleichende Anatomie der Pharmakognostisch Wichtigen Rhamnusrinden Unter Besonderer Berücksichtigung der Calciumoxalat-Bildung. Ph.D. Thesis, ETH Zürich, Zürich, Switzerland, 1936.
81. Lacombe, N.R.; Youngken, H.W. Studies on the anatomy of *Rhamnus lanceolata* Pursh and *Rhamnus frangula* L. *J. Am. Pharm. Assoc.* **1943**, *32*, 193–202.
82. Malmir, M.; Curica, C.; Gomes, E.T.; Serrano, R.; Silva, O. Contribution of light and electron microscopy to identification of bark from *Frangula azorica*, an Azorean medicinal plant. *Microsc. Microanal.* **2015**, *21*, 1296–1303.