Table 2 Utilization of different molecular marker system for gender identification in papaya and in other plant species

Plant species	Marker system	Size of sex-specific fragment (bp)	Gender specificity	References
C. papaya	RAPD	800 bp	Male	Parasnis et al., 2000
	RAPD	438bp	Hermaphrodite	Lemos et al., 2002
	RAPD	900 bp	Male	Bedoya et al., 2007
	RAPD	1.7 kb	Male and Hermaphrodite	
		0.4 kb	Male and Hermaphrodite	Niroshini et al., 2008
		2.18 kb	Female	
	RAPD	369 bp	Male and Hermaphrodite	Shivkumar et al., 2014
	SCAR	800 bp	Male and Hermaphrodite	Deputy et al., 2002
	SCAR	450 bp	Male and Hermaphrodite	Urasaki et al., 2002
	SCAR	800 bp	Male in Dioecious and Hermaphrodite in Gynodioecious	Chaturvedi et al., 2014
	ISSR	5kb	Male	Parasnis et al., 1999
	ISSR	-	Female and Hermaphrodite	Gangopadhyay et al., 2007
	ISSR	500 bp	Female and Hermaphrodite	Da Costa et al., 2011
Hemp (*Canabis sativa* L.)	AFLP	70-323 bp (16 markers in Can18 F1 progeny and 17 markers in Can17 accession)	Male	Flachowsky et al., 2001
	SSR	185 and 192 bp, 183 and 185 bp	Male Female	Rode et al., 2005
Hop (*Humulus lupulus* L.)	SSR	165 bp	Male	Jakse et al., 2008
Date palm (*Phoenix dactylifera* L.)	SSR	160/190 bp	Male	Elmeer et al., 2012
	SSR	250/250 bp 300/310 bp	Male	Maryam et al., 2016
Pistachio *(Pistacia vera* L.)	SNP	four SNP flanking loci (SNP-PIS-133396, SNP-PIS-136404, SNP-PIS-167992, SNP-PIS-174431)	Male and Female	Kafkas et al.,2015
Eucommia ulmoides Oliv	AFLP	350 bp	Male	Wang et al., 2011
Broussonetia papyrifera	AFLP	454 bp	Male	Lianjun et al., 2012
Simmondsia chinensis	AFLP	525 bp and 325 bp 270 bp	Male Female	Agarwal et al., 2011