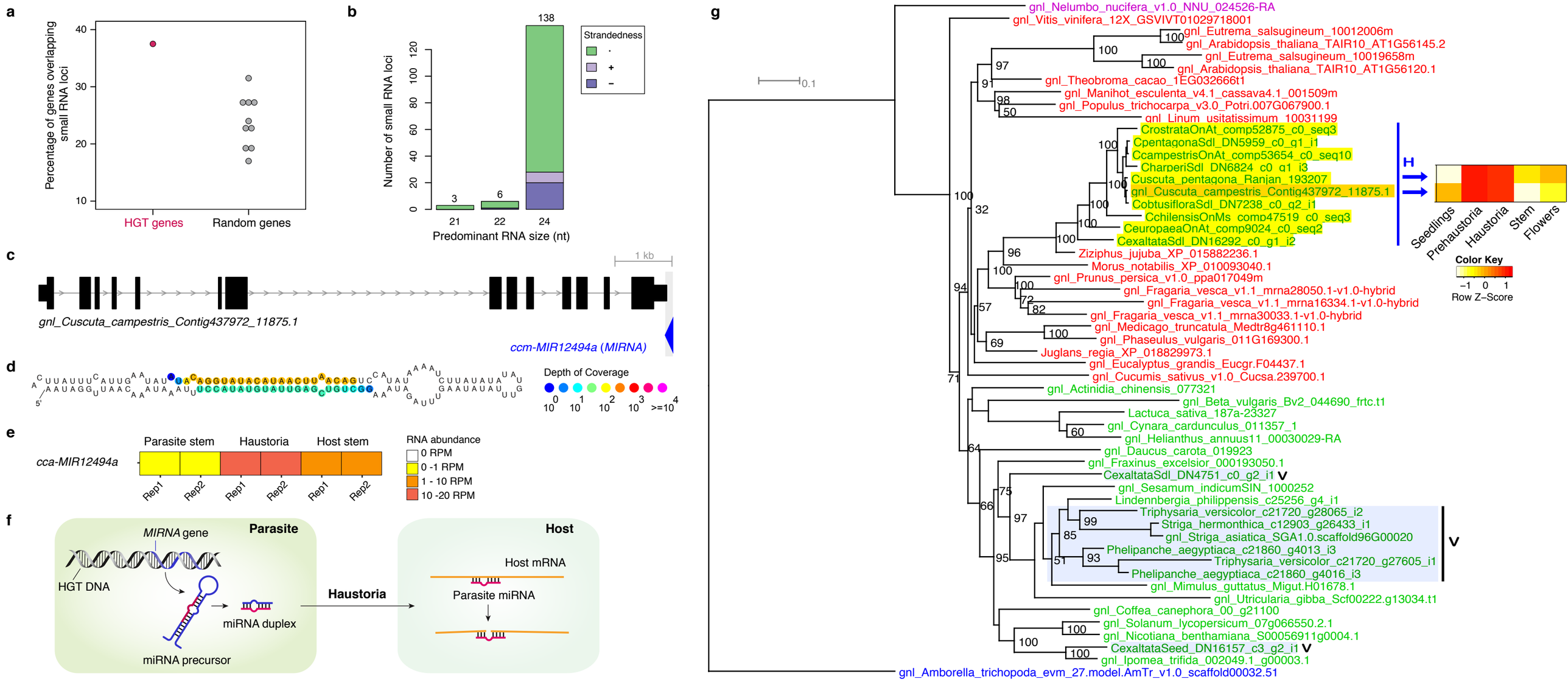
a
Percentage of genes overlapping small RNA loci
40
30
20
10
HGT genes
Random genes
b
Number of small RNA loci
120
100
80
60
40
20
0
138
3
6
21
22
24
Predominant RNA size (nt)
Strandedness
.
+
−
c
1 kb
gnl_Cuscuta_campestris_Contig437972_11875.1
ccm-MIR12494a (MIRNA)
d
5'
Depth of Coverage
0
10
1
10
2
10
3
10
>=10
4
e
cca-MIR12494a
Parasite stem
Haustoria
Host stem
Rep1
Rep2
Rep1
Rep2
Rep1
Rep2
RNA abundance
0 RPM
0 -1 RPM
1 - 10 RPM
10 -20 RPM
f
Parasite
MIRNA gene
HGT DNA
miRNA duplex
miRNA precursor
Haustoria
Host
Host mRNA
Parasite miRNA
g
0.1
gnl_Nelumbo_nucifera_v1.0_NNU_024526-RA
gnl_Vitis_vinifera_12X_GSVIVT01029718001
gnl_Eutrema_salsugineum_10012006m
gnl_Arabidopsis_thaliana_TAIR10_AT1G56145.2
gnl_Eutrema_salsugineum_10019658m
gnl_Arabidopsis_thaliana_TAIR10_AT1G56120.1
gnl_Theobroma_cacao_1EG032666t1
gnl_Manihot_esculenta_v4.1_cassava4.1_001509m
gnl_Populus_trichocarpa_v3.0_Potri.007G067900.1
gnl_Linum_usitatissimum_10031199
CrostrataOnAt_comp52875_c0_seq3
CpentagonaSdl_DN5959_c0_g1_i1
CcampestrisOnAt_comp53654_c0_seq10
CharperiSdl_DN6824_c0_g1_i3
Cuscuta_pentagona_Ranjan_193207
gnl_Cuscuta_campestris_Contig437972_11875.1
CobtusifloraSdl_DN7238_c0_g2_i1
CchilensisOnMs_comp47519_c0_seq3
CeuropaeaOnAt_comp9024_c0_seq2
CexaltataSdl_DN16292_c0_g1_i2
Ziziphus_jujuba_XP_015882236.1
Morus_notabilis_XP_010093040.1
gnl_Prunus_persica_v1.0_ppa017049m
gnl_Fragaria_vesca_v1.1_mrna28050.1-v1.0-hybrid
gnl_Fragaria_vesca_v1.1_mrna16334.1-v1.0-hybrid
gnl_Fragaria_vesca_v1.1_mrna30033.1-v1.0-hybrid
gnl_Medicago_truncatula_Medtr8g461110.1
gnl_Phaseulus_vulgaris_011G169300.1
Juglans_regia_XP_018829973.1
gnl_Eucalyptus_grandis_Eucgr.F04437.1
gnl_Cucumis_sativus_v1.0_Cucsa.239700.1
gnl_Actinidia_chinensis_077321
gnl_Beta_vulgaris_Bv2_044690_frtc.t1
Lactuca_sativa_187a-23327
gnl_Cynara_cardunculus_011357_1
gnl_Helianthus_annuus11_00030029-RA
gnl_Daucus_carota_019923
gnl_Fraxinus_excelsior_000193050.1
CexaltataSdl_DN4751_c0_g2_i1
gnl_Sesamum_indicumSIN_1000252
Lindennbergia_philippensis_c25256_g4_i1
Triphysaria_versicolor_c21720_g28065_i2
Striga_hermonthica_c12903_g26433_i1
gnl_Striga_asiatica_SGA1.0.scaffold96G00020
Phelipanche_aegyptiaca_c21860_g4013_i3
Triphysaria_versicolor_c21720_g27605_i1
Phelipanche_aegyptiaca_c21860_g4016_i3
gnl_Mimulus_guttatus_Migut.H01678.1
gnl_Utricularia_gibba_Scf00222.g13034.t1
gnl_Coffea_canephora_00_g21100
gnl_Solanum_lycopersicum_07g066550.2.1
gnl_Nicotiana_benthamiana_S00056911g0004.1
CexaltataSeed_DN16157_c3_g2_i1
gnl_Ipomea_trifida_002049.1_g00003.1
gnl_Amborella_trichopoda_evm_27.model.AmTr_v1.0_scaffold00032.51
H
V
V
Seedlings
Prehaustoria
Haustoria
Stem
Flowers
Color Key
−1
0
1
Row Z−Score