

## **Mitochondrial DNA and trade data support multiple origins of *Helicoverpa armigera* (Lepidoptera, Noctuidae) in Brazil**

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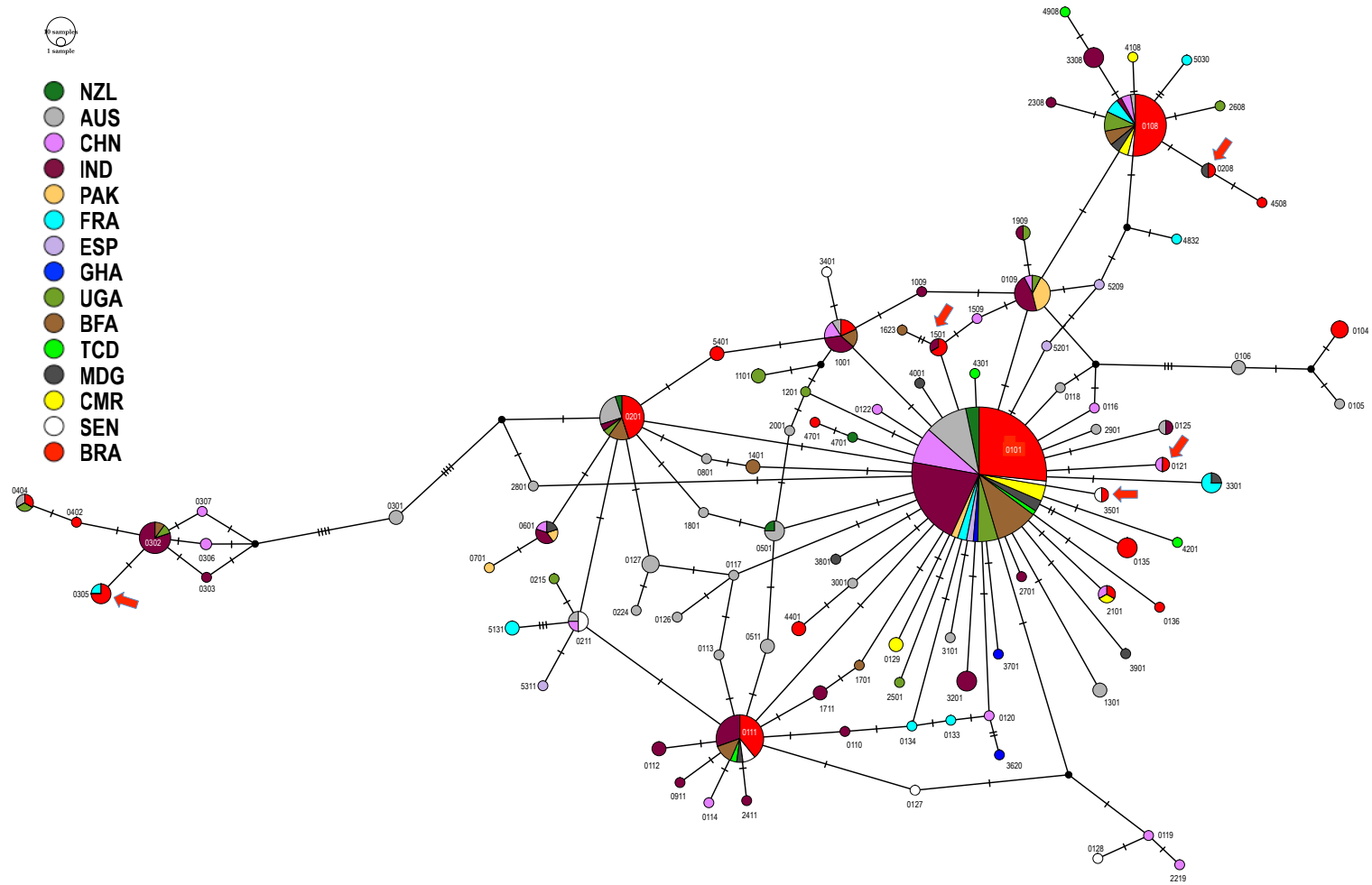
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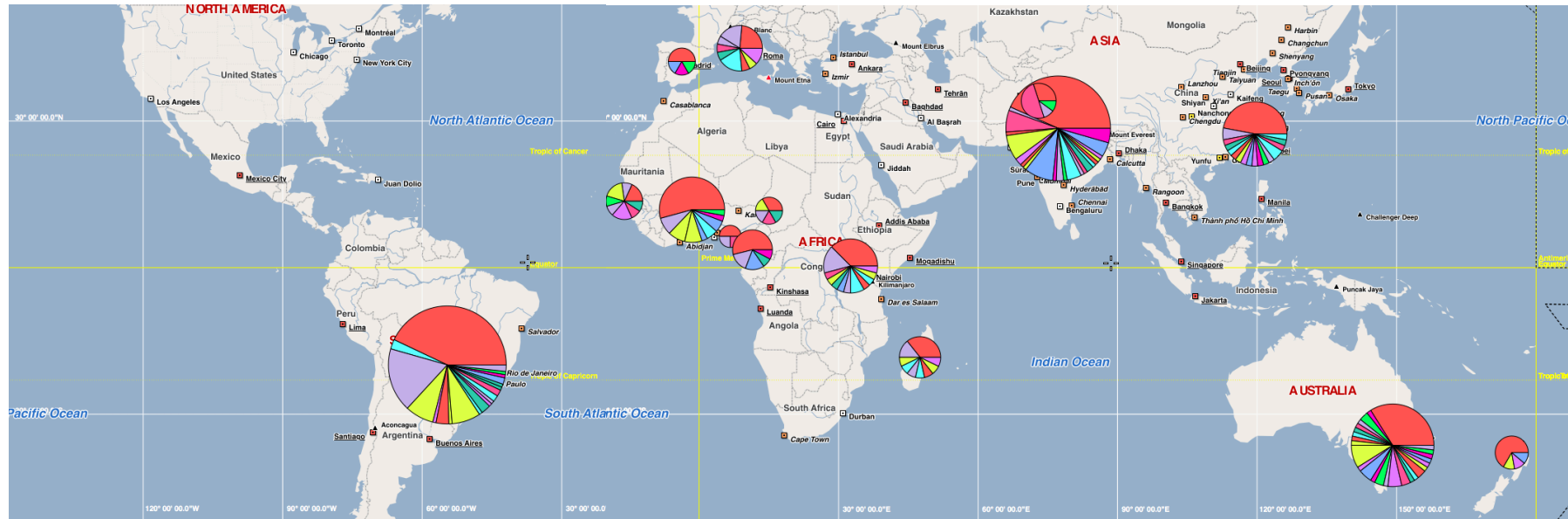
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**Suppl. Fig. 1:** Global *Helicoverpa armigera* mitochondrial DNA (mtDNA) haplotype network inferred from concatenation of 511bp mtDNA COI partial gene and 434bp mtDNA Cyt *b* partial gene. Shared unique mtDNA haplotypes between Brazil and Madagascar, Senegal, China, India and French Corsica are indicated by red arrows. Number of base changes between haplotypes are indicated by black bars.

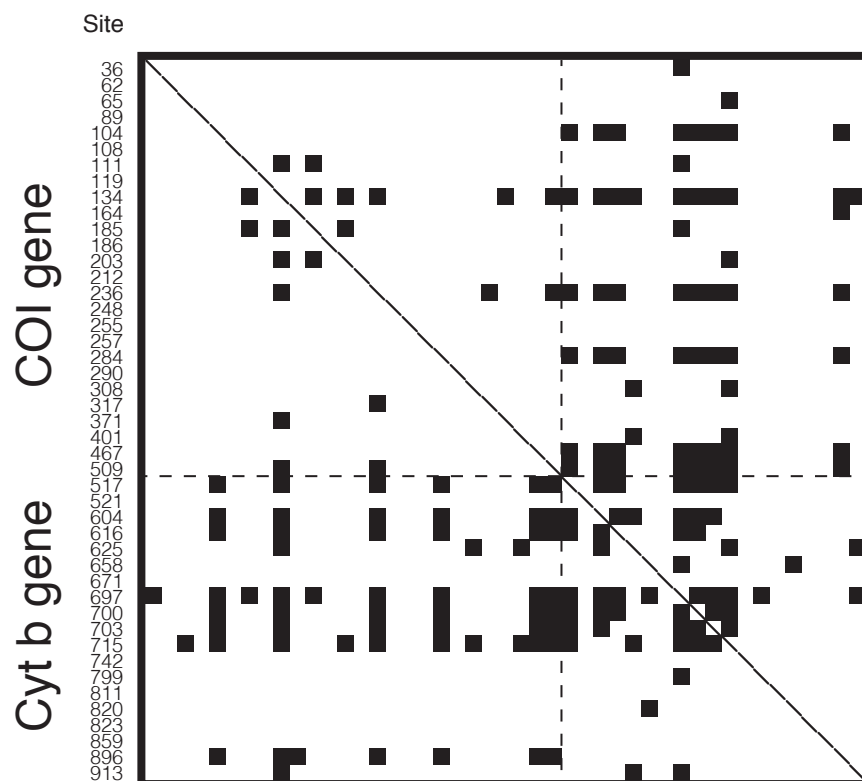


**Suppl. Fig. 2:** Haplotype distribution (from concatenated partial mtDNA COI-Cyt *b* genes) from sampling countries.

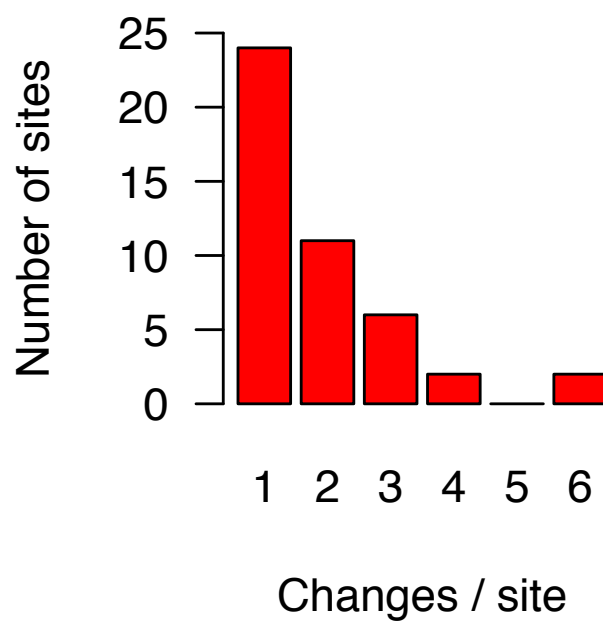


**Note:** The haplotype distribution map was created using the Allan Wilson Centre Imaging Evolution Initiative free open source population genetic software PopART <<http://popart.otago.ac.nz/index.shtml>>, superimposed on the Marble Virtual Globe (map theme: plain) using Marble Library version 0.17.0 <<http://edu.kde.org>> (Marble licensed under the terms of GNU LGPL version 2.1).

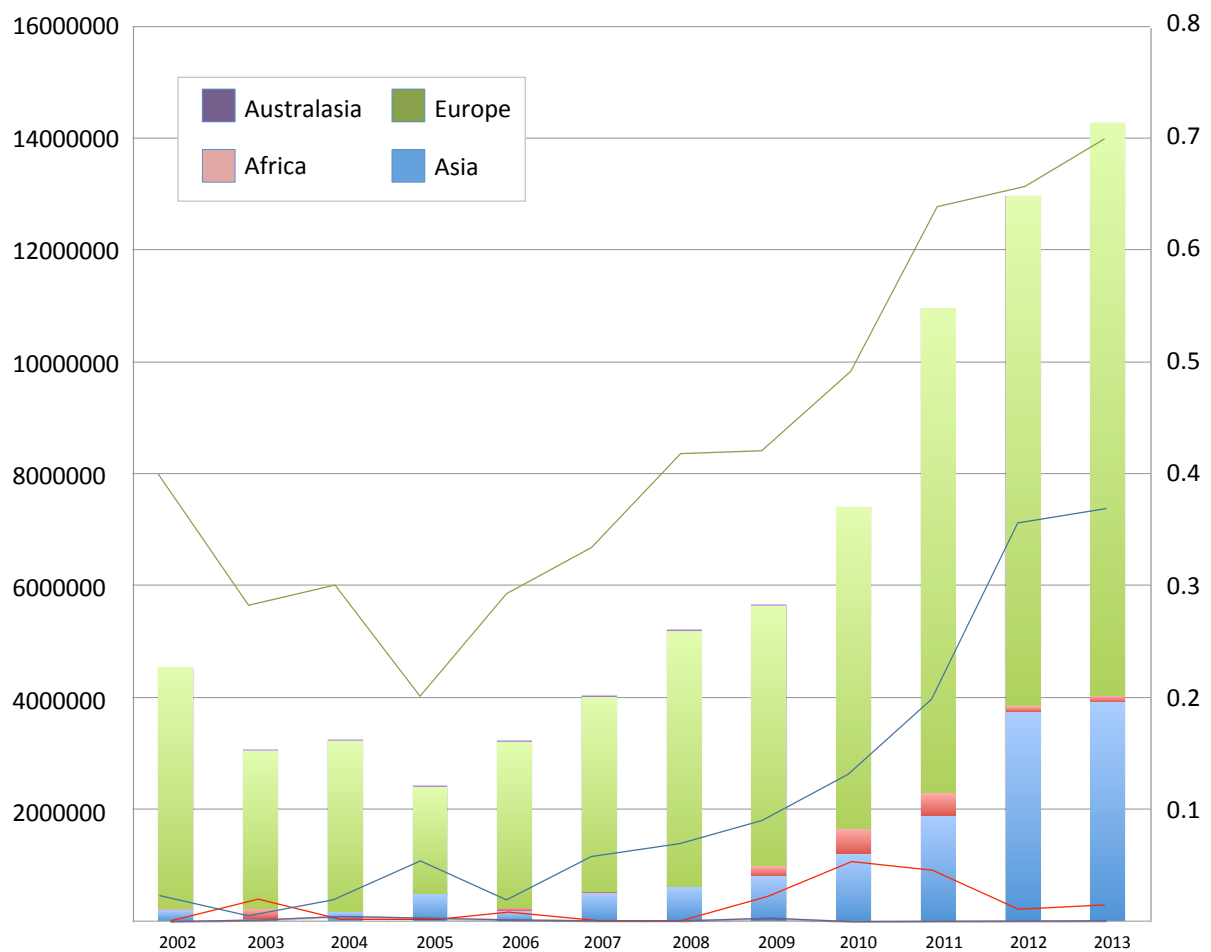
**Suppl. Fig. 3:** A compatibility plot from the master alignment was generated using the program Reticulate (see main text) to determine whether multiple substitutions have occurred at the same sites. Reticulate detects whether pairs of parsimony-informative sites are compatible or incompatible (sites are compatible if the most parsimonious distributions of their nucleotides fit the same tree). When sites are incompatible, additional substitutions will be required to fit their nucleotides to the same tree, implying that multiple substitutions must have occurred at one or both of the sites. Of the 45 parsimony-informative sites from the aligned sequences, 29 were incompatible with at least one other such site, thereby providing evidence for multiple substitutions at some sites. Compatible and incompatible parsimony-informative sites are showed by white pixels and black pixels, respectively. When two sites have evolved on the same tree and they are incompatible, then one or both of the sites must have changed at least twice since the sequences diverged from their last common ancestor.



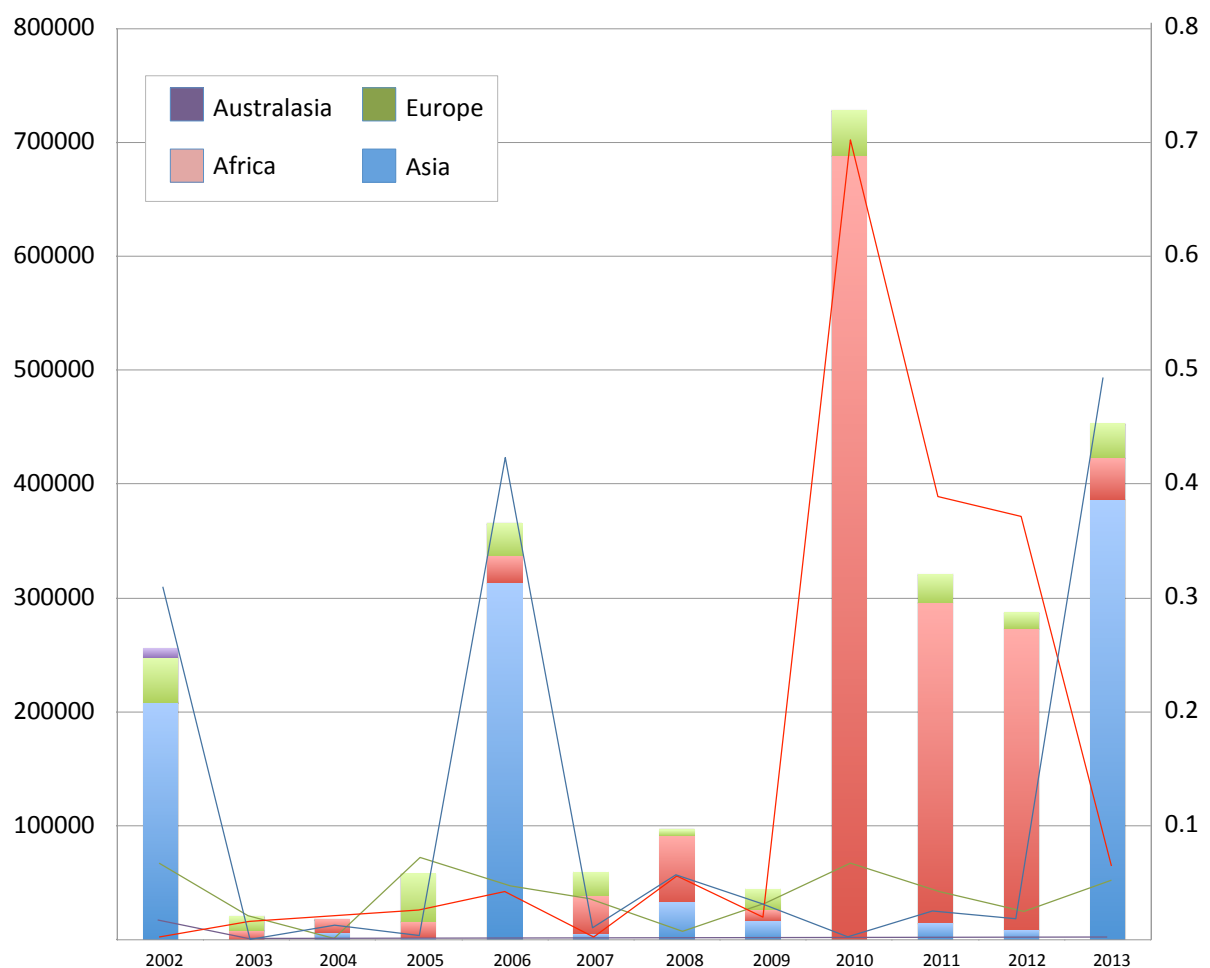
**Suppl. Fig. 4:** Results of how often the 45 parsimony-informative sites might have changed, with analyses identifying 47% of the sites have changed at least twice and that a small number of sites have changed at least six times since the sequences diverged from their last common ancestor. Distribution of the number of sites that have changed between one to six times since the 97 mtDNA COI-Cyt *b* haplotypes diverged from their most recent common ancestor (result is conditional on the most parsimonious tree for these data) are shown.



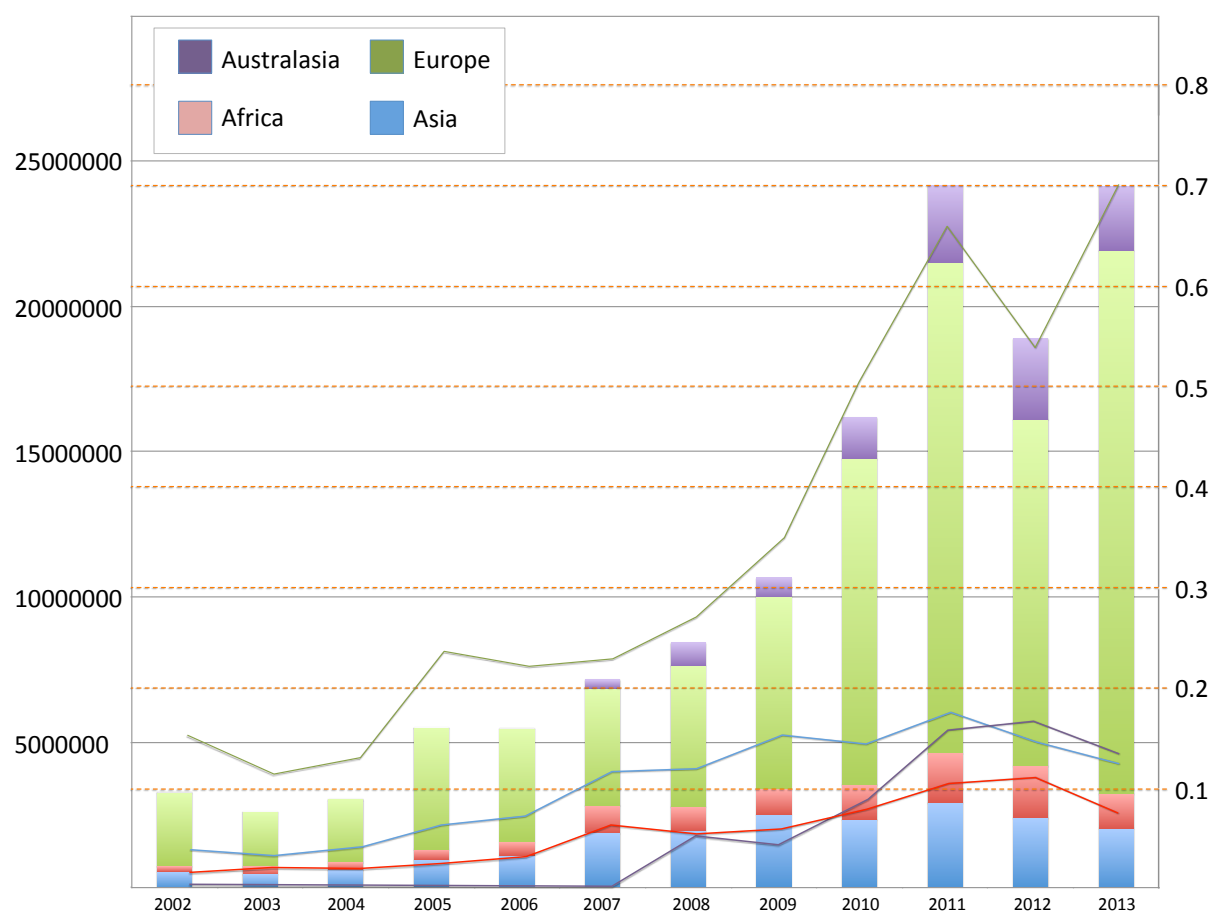
**Suppl. Fig. 5:** Trade volume between exporting countries from Asia, Africa, Europe and Australasia continents and Brazil. Data are for 12-years period (2002-2013; X-axis) for ‘Live trees, plants, bulbs, roots, cut flowers, etc.’ (Harmonized commodity description and coding system (HS code): 0602 (other live plants), 060210 (cuttings and slips, not rooted), 060310 (cut flowers, fresh), 060491 (foliage, branches for bouquets, fresh) in USD\$ (left Y-axis). Biosecurity entry risk factor (right Y-axis) for *H. armigera* that considered introduction, establishment and population spread as calculated for trade volume per year by region (i.e., Europe, Africa, Asia, Australasia) are also shown. For details see Suppl. Table 3.



**Suppl. Fig. 6:** Trade volume between exporting countries from Asia, Africa, Europe and Australasia continents and Brazil. Data are for 12-years period (2002-2013; X-axis) for 'Edible vegetables and certain roots and tubers.' (Harmonized commodity description and coding system (HS code): 070390 (Leeks and other alliaceous vegetables, fresh or chilled), 070519 (Lettuce, fresh or chilled except cabbage lettuce), 070810 (peas, shelled or unshelled, fresh or chilled), 070960 (peppers (Capsicum, Pimenta) fresh or chilled), 070970 (plants, live (including their roots), not elsewhere specified (nes)), 070990 (vegetables, fresh or chilled nes) in USD\$ (left Y-axis). Biosecurity entry risk factor (right Y-axis) for *H. armigera* that considered introduction, establishment and population spread as calculated for trade volume per year by region (i.e., Europe, Africa, Asia, Australasia) are also shown. For details see Suppl. Table 4.



**Suppl. Fig. 7:** Trade volume between exporting countries from Asia, Africa, Europe and Australasia continents and Brazil. Data are for 12-years period (2002-2013; X-axis) for 'Edible fruit, nuts, peel of citrus fruit, melons.' (Harmonized commodity description and coding system (HS code): 0804 (tropical fruits), 081010 (strawberries, fresh), 081090 (fruits, fresh nes)) in units of USD\$ (left Y-axis). Biosecurity entry risk factor (orange dotted lines, right Y-axis) for *H. armigera* that considered introduction, establishment and population spread as calculated for trade volume per year by region (i.e., Europe, Africa, Asia, Australasia) are also shown. For details see Suppl. Table 5.





Suppl. Table 1: *Helicoverpa armigera* samples information including sampling sites (country and/or state), sample ID, number of individuals sampled per site (n), and associated mtDNA COI and Cyt b haplotypes. The 'Old World' continents are Asia, Africa, Europe, Australasia, and the 'New World' continent is South America. Host crops information from which larvae of various instar-stages were collected is also provided. Adult moths with unknown hosts were collected either by light traps or by pheromone traps.

	Country, State and/or closest city names, (Collection Date), Host crops.	n	Sample ID	mtDNA COI Haplotypes	mtDNA Cyt b Haplotypes
<b>Asia</b>					
<b>India</b>					
1	Punjab/Abohar January-2005)	5	<b>001</b>	Harm-10	Harm-01
2	Host: Chickpea		<b>002</b>	Harm-01	Harm-01
3			<b>003</b>	Harm-10	Harm-01
4			<b>004</b>	Harm-01	Harm-01
5			<b>005</b>	Harm-01	Harm-01
6	Punjab/Bhatinda (January-2005)	5	<b>006</b>	Harm-19	Harm-09
7	Host: Chickpea		<b>007</b>	Harm-17	Harm-11
8			<b>008</b>	Harm-01	Harm-01
9			<b>009</b>	Harm-23	Harm-08
10			<b>010</b>	Harm-01	Harm-01
11	Punjab/Mansa (January-2005)	5	<b>011</b>	Harm-01	Harm-01
12	Host: Chickpea		<b>012</b>	Harm-01	Harm-01
13			<b>013</b>	Harm-01	Harm-10
14			<b>014</b>	Harm-24	Harm-11
15			<b>015</b>	Harm-01	Harm-01
16	Maharashtra/Nagpur (January-2005)	11	<b>016</b>	Harm-01	Harm-09
17	Host: Unknown (adults)		<b>017</b>	Harm-01	Harm-11
18			<b>018</b>	Harm-01	Harm-09
19			<b>019</b>	Harm-01	Harm-01
20			<b>020</b>	Harm-01	Harm-01
21			<b>021</b>	Harm-01	Harm-01
22			<b>022</b>	Harm-01	Harm-01
23			<b>023</b>	Harm-27	Harm-01
24			<b>024</b>	Harm-03	Harm-02
25			<b>025</b>	Harm-01	Harm-01
26			<b>026</b>	Harm-01	Harm-01
27	Maharashtra/Yavatmal (July-2005)	10	<b>027</b>	Harm-01	Harm-11
28	Host: Egg Plant		<b>028</b>	Harm-01	Harm-01
29			<b>029</b>	Harm-03	Harm-02
30			<b>030</b>	Harm-01	Harm-01
31			<b>031</b>	Harm-15	Harm-01
32			<b>032</b>	Harm-01	Harm-01
33			<b>033</b>	Harm-17	Harm-11
34			<b>034</b>	Harm-01	Harm-01
35			<b>035</b>	Harm-03	Harm-03
36			<b>036</b>	Harm-01	Harm-01
37	Maharashtra/Hingoli (November-2004)	5	<b>037</b>	Harm-01	Harm-01
38	Host: Cotton		<b>038</b>	Harm-01	Harm-01

39			<b>039</b>	Harm-10	Harm-01
40			<b>040</b>	Harm-10	Harm-09
41			<b>041</b>	Harm-01	Harm-01
42	Andhra Pradesh/Prakasam (December-2004)	6	<b>042</b>	Harm-01	Harm-09
43	Host: Cotton		<b>043</b>	Harm-01	Harm-09
44			<b>044</b>	Harm-01	Harm-09
45			<b>045</b>	Harm-01	Harm-01
46			<b>046</b>	Harm-01	Harm-09
47			<b>047</b>	Harm-01	Harm-01
48	Tamil Nadu/Coimbatore (January-2005)	22	<b>048</b>	Harm-01	Harm-11
49	Host: Pigeonpea		<b>049</b>	Harm-06	Harm-01
50			<b>050</b>	Harm-10	Harm-01
51			<b>051</b>	Harm-09	Harm-11
52			<b>052</b>	Harm-01	Harm-01
53			<b>053</b>	Harm-01	Harm-01
54			<b>054</b>	Harm-03	Harm-02
55			<b>055</b>	Harm-03	Harm-02
56			<b>056</b>	Harm-01	Harm-25
57			<b>057</b>	Harm-01	Harm-11
58			<b>058</b>	Harm-01	Harm-12
59			<b>059</b>	Harm-03	Harm-02
60			<b>060</b>	Harm-03	Harm-02
61			<b>061</b>	Harm-03	Harm-02
62			<b>062</b>	Harm-01	Harm-12
63			<b>063</b>	Harm-01	Harm-11
64			<b>064</b>	Harm-01	Harm-11
65			<b>065</b>	Harm-03	Harm-02
66			<b>066</b>	Harm-06	Harm-01
67			<b>067</b>	Harm-01	Harm-01
68			<b>068</b>	Harm-01	Harm-01
69			<b>069</b>	Harm-01	Harm-11
70	Telangana/Karimnagar (October-2005)	10	<b>070</b>	Harm-01	Harm-01
71	Host: Cotton		<b>071</b>	Harm-01	Harm-01
72			<b>072</b>	Harm-01	Harm-01
73			<b>073</b>	Harm-02	Harm-01
74			<b>074</b>	Harm-01	Harm-01
75			<b>075</b>	Harm-01	Harm-01
76			<b>076</b>	Harm-32	Harm-01
77			<b>077</b>	Harm-01	Harm-01
78			<b>078</b>	Harm-01	Harm-01
79			<b>079</b>	Harm-01	Harm-01
80	Telangana/Warangal (October-2005)	11	<b>080</b>	Harm-32	Harm-01
81	Host: Cotton		<b>081</b>	Harm-33	Harm-08
82			<b>082</b>	Harm-01	Harm-01
83			<b>083</b>	Harm-33	Harm-08
84			<b>084</b>	Harm-32	Harm-01
85			<b>085</b>	Harm-32	Harm-01
86			<b>086</b>	Harm-33	Harm-08
87			<b>087</b>	Harm-33	Harm-08
88			<b>088</b>	Harm-01	Harm-01

89			<b>089</b>	Harm-01	Harm-08
90			<b>090</b>	Harm-01	Harm-01

**Pakistan**

91	Multan (Nov-2004)	10	<b>091</b>	Harm-01	Harm-01
92	Host: Cotton		<b>092</b>	Harm-01	Harm-09
93			<b>093</b>	Harm-06	Harm-01
94			<b>094</b>	Harm-01	Harm-09
95			<b>095</b>	Harm-01	Harm-01
96			<b>096</b>	Harm-01	Harm-09
97			<b>097</b>	Harm-01	Harm-09
98			<b>098</b>	Harm-07	Harm-01
99			<b>099</b>	Harm-01	Harm-01
100			<b>100</b>	Harm-01	Harm-09

**China**

101	Shandong (February-2005)	34	<b>101</b>	Harm-01	Harm-08
102	Host: Cotton		<b>102</b>	Harm-01	Harm-08
103			<b>103</b>	Harm-03	Harm-06
104			<b>104</b>	Harm-06	Harm-01
105			<b>105</b>	Harm-01	Harm-01
106			<b>106</b>	Harm-01	Harm-01
107			<b>107</b>	Harm-02	Harm-11
108			<b>108</b>	Harm-01	Harm-01
109			<b>109</b>	Harm-01	Harm-16
110			<b>110</b>	Harm-01	Harm-14
111			<b>111</b>	Harm-01	Harm-22
112			<b>112</b>	Harm-01	Harm-01
113			<b>113</b>	Harm-01	Harm-21
114			<b>114</b>	Harm-01	Harm-01
115			<b>115</b>	Harm-10	Harm-01
116			<b>116</b>	Harm-01	Harm-01
117			<b>117</b>	Harm-01	Harm-01
118			<b>118</b>	Harm-01	Harm-01
119			<b>119</b>	Harm-01	Harm-19
120			<b>120</b>	Harm-01	Harm-01
121			<b>121</b>	Harm-15	Harm-09
122			<b>122</b>	Harm-01	Harm-01
123			<b>123</b>	Harm-01	Harm-01
124			<b>124</b>	Harm-22	Harm-19
125			<b>125</b>	Harm-01	Harm-01
126			<b>126</b>	Harm-01	Harm-01
127			<b>127</b>	Harm-03	Harm-07
128			<b>128</b>	Harm-01	Harm-01
129			<b>129</b>	Harm-21	Harm-01
130			<b>130</b>	Harm-01	Harm-20
131			<b>131</b>	Harm-01	Harm-09
132			<b>132</b>	Harm-01	Harm-01
133			<b>133</b>	Harm-10	Harm-01
134			<b>134</b>	Harm-01	Harm-01

**Africa**

135	Burkina Faso	35	<b>135</b>	Harm-01	Harm-01
136	Kenedougou (March-2003)		<b>136</b>	Harm-01	Harm-01

137	Host: Tomato	<b>137</b>	Harm-01	Harm-01
138		<b>138</b>	Harm-01	Harm-01
139		<b>139</b>	Harm-01	Harm-11
140		<b>140</b>	Harm-01	Harm-08
141		<b>141</b>	Harm-10	Harm-01
142		<b>142</b>	Harm-01	Harm-01
143		<b>143</b>	Harm-01	Harm-01
144		<b>144</b>	Harm-03	Harm-02
145		<b>145</b>	Harm-01	Harm-01
146		<b>146</b>	Harm-01	Harm-01
147		<b>147</b>	Harm-01	Harm-01
148		<b>148</b>	Harm-16	Harm-23
149		<b>149</b>	Harm-01	Harm-01
150		<b>150</b>	Harm-14	Harm-01
151		<b>151</b>	Harm-01	Harm-01
152		<b>152</b>	Harm-02	Harm-01
153		<b>153</b>	Harm-01	Harm-08
154		<b>154</b>	Harm-02	Harm-01
155		<b>155</b>	Harm-01	Harm-11
156		<b>156</b>	Harm-01	Harm-01
157		<b>157</b>	Harm-01	Harm-01
158		<b>158</b>	Harm-01	Harm-01
159		<b>159</b>	Harm-01	Harm-01
160		<b>160</b>	Harm-10	Harm-01
161		<b>161</b>	Harm-14	Harm-01
162		<b>162</b>	Harm-02	Harm-01
163		<b>163</b>	Harm-01	Harm-01
164		<b>164</b>	Harm-01	Harm-01
165		<b>165</b>	Harm-01	Harm-01
166		<b>166</b>	Harm-17	Harm-01
167		<b>167</b>	Harm-01	Harm-01
168		<b>168</b>	Harm-01	Harm-08
169		<b>169</b>	Harm-01	Harm-11
170	Uganda	<b>170</b>	Harm-04	Harm-04
171	Kampala (November-2005)	<b>171</b>	Harm-02	Harm-01
172	Host: Cotton	<b>172</b>	Harm-02	Harm-15
173		<b>173</b>	Harm-01	Harm-01
174		<b>174</b>	Harm-11	Harm-01
175		<b>175</b>	Harm-01	Harm-01
176		<b>176</b>	Harm-01	Harm-09
177		<b>177</b>	Harm-01	Harm-08
178		<b>178</b>	Harm-12	Harm-01
179		<b>179</b>	Harm-01	Harm-08
180		<b>180</b>	Harm-01	Harm-01
181		<b>181</b>	Harm-01	Harm-01
182		<b>182</b>	Harm-01	Harm-08
183		<b>183</b>	Harm-01	Harm-08
184		<b>184</b>	Harm-01	Harm-01
185		<b>185</b>	Harm-03	Harm-02
186		<b>186</b>	Harm-01	Harm-01
187		<b>187</b>	Harm-25	Harm-01
188		<b>188</b>	Harm-19	Harm-09
189		<b>189</b>	Harm-01	Harm-01

190			<b>190</b>	Harm-26	Harm-08
191			<b>191</b>	Harm-01	Harm-01
192			<b>192</b>	Harm-01	Harm-01
193			<b>193</b>	Harm-11	Harm-01
194	<b>Senegal</b>	11	<b>194</b>	Harm-01	Harm-01
195	Noto (2005)		<b>195</b>	Harm-02	Harm-11
196	Host: Tomato		<b>196</b>	Harm-01	Harm-27
197			<b>197</b>	Harm-01	Harm-28
198			<b>198</b>	Harm-34	Harm-01
199			<b>199</b>	Harm-01	Harm-01
200			<b>200</b>	Harm-01	Harm-08
201			<b>201</b>	Harm-02	Harm-11
202			<b>202</b>	Harm-01	Harm-11
203			<b>203</b>	Harm-01	Harm-11
204			<b>204</b>	Harm-35	Harm-01
205	<b>Ghana</b>	4	<b>205</b>	Harm-36	Harm-20
206	Tamale (June-2014)		<b>206</b>	Harm-01	Harm-01
207	Host: Cowpea		<b>207</b>	Harm-37	Harm-01
208			<b>208</b>	Harm-01	Harm-01
209	<b>Madagascar</b>	14	<b>209</b>	Harm-38	Harm-01
210	Antsirabe (2006)		<b>210</b>	Harm-01	Harm-01
211	Host: Corn		<b>211</b>	Harm-39	Harm-01
212			<b>212</b>	Harm-01	Harm-08
213			<b>213</b>	Harm-01	Harm-01
214			<b>214</b>	Harm-02	Harm-08
215			<b>215</b>	Harm-01	Harm-01
216			<b>216</b>	Harm-40	Harm-01
217			<b>217</b>	Harm-01	Harm-11
218			<b>218</b>	Harm-33	Harm-01
219			<b>219</b>	Harm-01	Harm-01
220			<b>220</b>	Harm-01	Harm-01
221			<b>221</b>	Harm-06	Harm-01
222			<b>222</b>	Harm-01	Harm-08
223	<b>Cameroon</b>	13	<b>223</b>	Harm-01	Harm-08
224	Dakar (2005)		<b>224</b>	Harm-01	Harm-01
225	Host: Tomato		<b>225</b>	Harm-01	Harm-01
226			<b>226</b>	Harm-01	Harm-01
227			<b>227</b>	Harm-01	Harm-01
228			<b>228</b>	Harm-01	Harm-01
229			<b>229</b>	Harm-01	Harm-29
230			<b>230</b>	Harm-41	Harm-08
231			<b>231</b>	Harm-01	Harm-29
232			<b>232</b>	Harm-01	Harm-01
233			<b>233</b>	Harm-01	Harm-01
234			<b>234</b>	Harm-21	Harm-01
235			<b>235</b>	Harm-01	Harm-08
236	<b>Chad</b>	6	<b>236</b>	Harm-01	Harm-01
237	Pala (2006)		<b>237</b>	Harm-42	Harm-01
238	Host: Cotton		<b>238</b>	Harm-43	Harm-01

239			<b>239</b>	Harm-01	Harm-11
240			<b>240</b>	Harm-49	Harm-08
241			<b>241</b>	Harm-01	Harm-01

### Australasia

#### Australia

242	Victoria/Dalmore (April-2005)	24	<b>242</b>	Harm-02	Harm-01
243	Host: Corn		<b>243</b>	Harm-01	Harm-01
244			<b>244</b>	Harm-02	Harm-01
245			<b>245</b>	Harm-05	Harm-11
246			<b>246</b>	Harm-08	Harm-01
247			<b>247</b>	Harm-02	Harm-24
248			<b>248</b>	Harm-01	Harm-13
249			<b>249</b>	Harm-02	Harm-17
250			<b>250</b>	Harm-01	Harm-01
251			<b>251</b>	Harm-01	Harm-01
252			<b>252</b>	Harm-05	Harm-01
253			<b>253</b>	Harm-01	Harm-01
254			<b>254</b>	Harm-01	Harm-01
255			<b>255</b>	Harm-02	Harm-01
256			<b>256</b>	Harm-02	Harm-17
257			<b>257</b>	Harm-04	Harm-04
258			<b>258</b>	Harm-01	Harm-01
259			<b>259</b>	Harm-01	Harm-01
260			<b>260</b>	Harm-01	Harm-01
261			<b>261</b>	Harm-02	Harm-17
262			<b>262</b>	Harm-01	Harm-06
263			<b>263</b>	Harm-01	Harm-01
264			<b>264</b>	Harm-02	Harm-11
265			<b>265</b>	Harm-01	Harm-25
266	Victoria/Orbost (April-2005)	22	<b>266</b>	Harm-01	Harm-01
267	Host: Corn		<b>267</b>	Harm-01	Harm-01
268			<b>268</b>	Harm-05	Harm-01
269			<b>269</b>	Harm-05	Harm-11
270			<b>270</b>	Harm-01	Harm-01
271			<b>271</b>	Harm-01	Harm-01
272			<b>272</b>	Harm-31	Harm-01
273			<b>273</b>	Harm-01	Harm-01
274			<b>274</b>	Harm-03	Harm-01
275			<b>275</b>	Harm-01	Harm-05
276			<b>276</b>	Harm-01	Harm-01
277			<b>277</b>	Harm-01	Harm-18
278			<b>278</b>	Harm-01	Harm-17
279			<b>279</b>	Harm-01	Harm-06
280			<b>280</b>	Harm-01	Harm-08
281			<b>281</b>	Harm-29	Harm-01
282			<b>282</b>	Harm-03	Harm-01
283			<b>283</b>	Harm-13	Harm-01
284			<b>284</b>	Harm-01	Harm-01
285			<b>285</b>	Harm-05	Harm-01
286			<b>286</b>	Harm-01	Harm-01
287			<b>287</b>	Harm-02	Harm-01

288	Victoria/Werribee (January-2001)	10	<b>288</b>	Harm-30	Harm-01
289	Host: Unknown (adults)		<b>289</b>	Harm-10	Harm-01
290			<b>290</b>	Harm-01	Harm-01
291			<b>291</b>	Harm-28	Harm-01
292			<b>292</b>	Harm-13	Harm-01
293			<b>293</b>	Harm-18	Harm-01
294			<b>294</b>	Harm-01	Harm-01
295			<b>295</b>	Harm-02	Harm-01
296			<b>296</b>	Harm-20	Harm-01
297			<b>297</b>	Harm-01	Harm-26

#### NEW ZEALAND

298	Auckland/Pukekohe (June-2004)	9	<b>298</b>	Harm-01	Harm-01
299	Host: Unknown (adults)		<b>299</b>	Harm-01	Harm-01
300			<b>300</b>	Harm-05	Harm-01
301			<b>301</b>	Harm-01	Harm-01
302			<b>302</b>	Harm-47	Harm-01
303			<b>303</b>	Harm-02	Harm-01
304			<b>304</b>	Harm-01	Harm-01
305			<b>305</b>	Harm-01	Harm-01
306			<b>306</b>	Harm-01	Harm-01

#### Europe

##### France

307	Montpellier (2013)	3	<b>307</b>	Harm-33	Harm-01
308	Host: Medicago		<b>308</b>	Harm-33	Harm-01
309			<b>309</b>	Harm-33	Harm-01
310	French Corsica (July-2013)	14	<b>310</b>	Harm-01	Harm-01
311	Host: Medicago		<b>311</b>	Harm-01	Harm-08
312			<b>312</b>	Harm-50	Harm-30
313			<b>313</b>	Harm-01	Harm-01
314			<b>314</b>	Harm-51	Harm-31
315			<b>315</b>	Harm-01	Harm-01
316			<b>316</b>	Harm-48	Harm-32
317			<b>317</b>	Harm-03	Harm-05
318			<b>318</b>	Harm-01	Harm-33
319			<b>319</b>	Harm-01	Harm-34
320			<b>320</b>	Harm-01	Harm-08
321			<b>321</b>	Harm-51	Harm-31
322			<b>322</b>	Harm-01	Harm-08
323			<b>323</b>	Harm-01	Harm-01

##### Spain

324	Seville (September-2013)	6	<b>324</b>	Harm-01	Harm-01
325	Host: Medicago		<b>325</b>	Harm-52	Harm-09
326			<b>326</b>	Harm-01	Harm-01
327			<b>327</b>	Harm-53	Harm-11
328			<b>328</b>	Harm-52	Harm-01
329			<b>329</b>	Harm-01	Harm-01

**Old World Total** 329

#### South America

##### BRAZIL

1	Goiás/Palmeiras de Goiás (August-2013)	10	<b>330</b>	Harm-01	Harm-35
2	Host: Tomato		<b>331</b>	Harm-01	Harm-21
3			<b>332</b>	Harm-01	Harm-08
4			<b>333</b>	Harm-01	Harm-08
5			<b>334</b>	Harm-01	Harm-35
6			<b>335</b>	Harm-01	Harm-11
7			<b>336</b>	Harm-01	Harm-35
8			<b>337</b>	Harm-01	Harm-35
9			<b>338</b>	Harm-01	Harm-08
10			<b>339</b>	Harm-01	Harm-08
11	Goiás/Palmeiras de Goiás (2013)	8	<b>340</b>	Harm-21	Harm-01
12	Host: Millet		<b>341</b>	Harm-01	Harm-01
13			<b>342</b>	Harm-01	Harm-01
14			<b>343</b>	Harm-01	Harm-01
15			<b>344</b>	Harm-01	Harm-01
16			<b>345</b>	Harm-01	Harm-01
17			<b>346</b>	Harm-01	Harm-01
18	Goiás/Brasília/Planaltina (Distrito Federal) (2013)	8	<b>347</b>	Harm-35	Harm-01
19	Host: Bean		<b>348</b>	Harm-02	Harm-01
20			<b>349</b>	Harm-01	Harm-08
21			<b>350</b>	Harm-01	Harm-01
22			<b>351</b>	Harm-01	Harm-01
23			<b>352</b>	Harm-02	Harm-01
24			<b>353</b>	Harm-01	Harm-01
25			<b>354</b>	Harm-01	Harm-01
26			<b>355</b>	Harm-01	Harm-01
27	Goiás/Morrinhos (August-2013)	9	<b>356</b>	Harm-02	Harm-01
28	Host: Tomato		<b>357</b>	Harm-01	Harm-01
29			<b>358</b>	Harm-01	Harm-08
30			<b>359</b>	Harm-01	Harm-11
31			<b>360</b>	Harm-01	Harm-08
32			<b>361</b>	Harm-01	Harm-08
33			<b>362</b>	Harm-01	Harm-01
34			<b>363</b>	Harm-04	Harm-02
35			<b>364</b>	Harm-54	Harm-01
36	Minas Gerais/Patos de Minas (April-2013)	7	<b>365</b>	Harm-02	Harm-01
37	Host: Cotton		<b>366</b>	Harm-01	Harm-01
38			<b>367</b>	Harm-02	Harm-01
39			<b>368</b>	Harm-01	Harm-08
40			<b>369</b>	Harm-01	Harm-01
41			<b>370</b>	Harm-02	Harm-01
42			<b>371</b>	Harm-01	Harm-01
43	Goiás/Brazabrantas (August-2013)	11	<b>372</b>	Harm-02	Harm-01
44	Host: Tomato		<b>373</b>	Harm-01	Harm-08
45			<b>374</b>	Harm-01	Harm-01
46			<b>375</b>	Harm-01	Harm-36
47			<b>376</b>	Harm-01	Harm-04
48			<b>377</b>	Harm-01	Harm-01
49			<b>378</b>	Harm-01	Harm-11



50			<b>379</b>	Harm-46	Harm-01
51			<b>380</b>	Harm-01	Harm-01
52			<b>381</b>	Harm-01	Harm-04
53			<b>382</b>	Harm-01	Harm-01
54	Paraná/Ivaiporã (August-2013)	3	<b>383</b>	Harm-01	Harm-08
55	Host: Wheat		<b>384</b>	Harm-01	Harm-01
56			<b>385</b>	Harm-01	Harm-08
57	Bahia/Correntina (April-2013)	1	<b>386</b>	Harm-01	Harm-01
	Host: cotton				
58	Maranhão/Alto Parnaíba (April-2013)	2	<b>387</b>	Harm-01	Harm-01
59	Host: cotton		<b>388</b>	Harm-04	Harm-04
60	Mato Grosso/PVA do Leste (May-2013)	7	<b>389</b>	Harm-01	Harm-08
61	Host: Cotton		<b>390</b>	Harm-01	Harm-01
62			<b>391</b>	Harm-01	Harm-11
63			<b>392</b>	Harm-03	Harm-05
64			<b>393</b>	Harm-01	Harm-01
65			<b>394</b>	Harm-01	Harm-01
66			<b>395</b>	Harm-01	Harm-08
67	Mato Grosso/Pedra Preta (April-2013)	3	<b>396</b>	Harm-01	Harm-01
68	Host: Cotton		<b>397</b>	Harm-01	Harm-08
69			<b>398</b>	Harm-01	Harm-01
70	Mato Grosso/PVA do Leste (June-2013)	9	<b>399</b>	Harm-03	Harm-05
71	Host: Cotton		<b>400</b>	Harm-02	Harm-08
72			<b>401</b>	Harm-01	Harm-01
73			<b>402</b>	Harm-03	Harm-05
74			<b>403</b>	Harm-01	Harm-01
75			<b>404</b>	Harm-01	Harm-11
76			<b>405</b>	Harm-01	Harm-08
77			<b>406</b>	Harm-02	Harm-01
78			<b>407</b>	Harm-01	Harm-11
79	Mato Grosso/Pedra Preta (March-2013)	4	<b>408</b>	Harm-01	Harm-01
80	Host: Cotton		<b>409</b>	Harm-01	Harm-01
81			<b>410</b>	Harm-44	Harm-01
82			<b>411</b>	Harm-44	Harm-01
83	Mato Grosso (June-2013)	2	<b>412</b>	Harm-01	Harm-01
84	Host: Pearl Millet		<b>413</b>	Harm-01	Harm-01
85	Mato Grosso/Ipiranga do Norte (June-2013)	3	<b>414</b>	Harm-01	Harm-01
86	Host: Cotton		<b>415</b>	Harm-54	Harm-01
87			<b>416</b>	Harm-01	Harm-01
88	Mato Grosso/Campo Verde (May-2013)	1	<b>417</b>	Harm-01	Harm-11
	Host: Corn				
89	Mato Grosso/Campo Verde (June-2013)	6	<b>418</b>	Harm-01	Harm-01
90	Host: Cotton		<b>419</b>	Harm-01	Harm-01

91			<b>420</b>	Harm-01	Harm-01
92			<b>421</b>	Harm-01	Harm-01
93			<b>422</b>	Harm-01	Harm-11
94			<b>423</b>	Harm-01	Harm-01
95	Mato Grosso (June-2013)	6	<b>424</b>	Harm-01	Harm-01
96	Host: Sunflower		<b>425</b>	Harm-01	Harm-01
97			<b>426</b>	Harm-01	Harm-01
98			<b>427</b>	Harm-01	Harm-01
99			<b>428</b>	Harm-01	Harm-11
100			<b>429</b>	Harm-01	Harm-01
101	Mato Grosso/Pedra Preta (June-2013) Host: Cotton	1	<b>430</b>	Harm-02	Harm-01
102	Mato Grosso/Guiratinga (June-2013)	3	<b>431</b>	Harm-01	Harm-01
103	Host: Cotton		<b>432</b>	Harm-10	Harm-01
104			<b>433</b>	Harm-01	Harm-01
105	Mato Grosso/Rondonópolis (June-2013)	3	<b>434</b>	Harm-01	Harm-08
106	Host: Cotton		<b>435</b>	Harm-01	Harm-01
107			<b>436</b>	Harm-01	Harm-08
108	Mato Grosso/Sapezal (June-2013)	7	<b>437</b>	Harm-01	Harm-08
109	Host: Unknown (adult moths)		<b>438</b>	Harm-15	Harm-01
110			<b>439</b>	Harm-01	Harm-01
111			<b>440</b>	Harm-01	Harm-08
112			<b>441</b>	Harm-45	Harm-08
113			<b>442</b>	Harm-01	Harm-01
114			<b>443</b>	Harm-15	Harm-01

**Old World Total**

114

**Suppl. Table 2:** Global *H. armiger* mtDNA COI and Cyt b haplotypes. Matched unique mtDNA COI-Cytb haplotypes between Brazil and Old World countries are in red colour. Unmatched unique Brazilian haplotypes are in blue. Filled cells indicates haplotypes detected in individual countries. Haplotype codes are as referred in the main text and are provided for (COI, Cytb). ISO country codes are: NZL (New Zealand), AUS (Australia), CHN (China), IND (India), PAK (Pakistan), FRA (France), ESP (Spain), GHA (Ghana), UGA (Uganda), BFA (Burkina Faso), TCD (Chad), MDG (Madagascar), CMR (Cameroon), SEN (Senegal), BRA (Brazil). Note that 21 new mtDNA COI (GenBank: KX494879-KX494899) and 10 new mtDNA Cytb haplotypes (GenBank: KX494900-KX494909) were found in Senegal (n\_COI=2; n\_Cytb=2), Ghana (n\_COI=2), Madagascar (n\_COI=3), Chad (n\_COI=3), Cameroon (n\_COI=1; n\_Cytb=1), Spain (n\_COI=3), French Corsica (n\_COI=3; n\_Cytb=5), New Zealand (n\_COI=1), and Brazil (n\_COI=5; n\_Cytb=2), and seven haplotypes were found in Brazil as well as in more than one other country (i.e., Hap0101 in New Zealand, Australia, China, India, Pakistan, France, Spain, Cameroon, Uganda, Ghana, Madagascar, Chad, Burkina Faso and Senegal; Hap0108 in Australia, France, China, India, Uganda, Burkina Faso, Madagascar, Cameroon and Senegal; Hap0111 in Madagascar, Cameroon, Burkina Faso, Chad and India; Hap0201 in New Zealand, Australia, India, Burkina Faso and Uganda; Hap0404 in Uganda and Australia; Hap1001 in Australia, China, India and Burkina Faso; and Hap2101 in China and Cameroon).

Haplotype codes	NZL	AUS	CHN	IND	PAK	FRA	ESP	GHA	UGA	BFA	TCD	MDG	CMR	SEN	BRA	COI Haplotypes	Cyt b Haplotypes	COI Haplotype GenBank Acc. No.	Cyt b Haplotypes GenBank Acc. No.
1 Hap0101																COI-Harm-01	Harm-01	EF116226	EF410022
2 Hap0104																COI-Harm-01	Harm-04	EF116226	EF410023
3 Hap0105																COI-Harm-01	Harm-05	EF116226	EF410024
4 Hap0106																COI-Harm-01	Harm-06	EF116226	EF410025
5 Hap0108																COI-Harm-01	Harm-08	EF116226	EF410027
6 Hap0109																COI-Harm-01	Harm-09	EF116226	EF410028
7 Hap0110																COI-Harm-01	Harm-10	EF116226	EF410029
8 Hap0111																COI-Harm-01	Harm-11	EF116226	EF410030
9 Hap0112																COI-Harm-01	Harm-12	EF116226	EF410031
10 Hap0113																COI-Harm-01	Harm-13	EF116226	EF410032
11 Hap0114																COI-Harm-01	Harm-14	EF116226	EF410033
12 Hap0116																COI-Harm-01	Harm-16	EF116226	EF410035
13 Hap0117																COI-Harm-01	Harm-17	EF116226	EF410036
14 Hap0118																COI-Harm-01	Harm-18	EF116226	EF410037
15 Hap0119																COI-Harm-01	Harm-19	EF116226	EF410038
16 Hap0120																COI-Harm-01	Harm-20	EF116226	EF410039
17 Hap0121																COI-Harm-01	Harm-21	EF116226	EF410040
18 Hap0122																COI-Harm-01	Harm-22	EF116226	EF410041
19 Hap0125																COI-Harm-01	Harm-25	EF116226	EF410044
20 Hap0126																COI-Harm-01	Harm-26	EF116226	EF410045
21 Hap0127																COI-Harm-01	Harm-27	EF116226	KX494900
22 Hap0128																COI-Harm-01	Harm-28	EF116226	KX494901
23 Hap0129																COI-Harm-01	Harm-29	EF116226	KX494902
24 Hap0133																COI-Harm-01	Harm-33	EF116226	KX494906
25 Hap0134																COI-Harm-01	Harm-34	EF116226	KX494907
26 Hap0135																COI-Harm-01	Harm-35	EF116226	KX494908
27 Hap0136																COI-Harm-01	Harm-36	EF116226	KX494909
28 Hap0201																COI-Harm-02	Harm-01	EF116227	EF410020
29 Hap0208																COI-Harm-02	Harm-08	EF116227	EF410027
30 Hap0211																COI-Harm-02	Harm-11	EF116227	EF410030
31 Hap0215																COI-Harm-02	Harm-15	EF116227	EF410034
32 Hap0217																COI-Harm-02	Harm-17	EF116227	EF410036
33 Hap0224																COI-Harm-02	Harm-24	EF116227	EF410043
34 Hap0301																COI-Harm-03	Harm-01	EF116228	EF410020
35 Hap0302																COI-Harm-03	Harm-02	EF116228	EF410021
36 Hap0303																COI-Harm-03	Harm-03	EF116228	EF410022
37 Hap0305																COI-Harm-03	Harm-05	EF116228	EF410024
38 Hap0306																COI-Harm-03	Harm-06	EF116228	EF410025
39 Hap0307																COI-Harm-03	Harm-07	EF116228	EF410026
40 Hap0402																COI-Harm-04	Harm-02	EF116229	EF410021
41 Hap0404																COI-Harm-04	Harm-04	EF116229	EF410023
42 Hap0501																COI-Harm-05	Harm-01	EF116230	EF410020
43 Hap0511																COI-Harm-05	Harm-11	EF116230	EF410030
44 Hap0601																COI-Harm-06	Harm-01	EF116231	EF410020
45 Hap0701																COI-Harm-07	Harm-01	EF116232	EF410020
46 Hap0801																COI-Harm-08	Harm-01	EF116233	EF410020
47 Hap0911																COI-Harm-09	Harm-11	EF116234	EF410030
48 Hap1001																COI-Harm-10	Harm-01	EF116235	EF410020
49 Hap1009																COI-Harm-10	Harm-09	EF116235	EF410028
50 Hap1101																COI-Harm-11	Harm-01	EF116236	EF410020
51 Hap1201																COI-Harm-12	Harm-01	EF116237	EF410020
52 Hap1301																COI-Harm-13	Harm-01	EF116238	EF410020
53 Hap1401																COI-Harm-14	Harm-01	EF116239	EF410020
54 Hap1501																COI-Harm-15	Harm-01	EF116240	EF410020
55 Hap1509																COI-Harm-15	Harm-09	EF116240	EF410028
56 Hap1623																COI-Harm-16	Harm-23	EF116241	EF410042
57 Hap1701																COI-Harm-17	Harm-01	EF116242	EF410020
58 Hap1711																COI-Harm-17	Harm-11	EF116242	EF410030
59 Hap1801																COI-Harm-18	Harm-01	EF116243	EF410020
60 Hap1909																COI-Harm-19	Harm-09	EF116244	EF410028
61 Hap2001																COI-Harm-20	Harm-01	EF116245	EF410020
62 Hap2101																COI-Harm-21	Harm-01	EF116246	EF410020
63 Hap2219																COI-Harm-22	Harm-19	EF116247	EF410038
64 Hap2308																COI-Harm-23	Harm-08	EF116248	EF410027
65 Hap2411																COI-Harm-24	Harm-11	EF116249	EF410030
66 Hap2501																COI-Harm-25	Harm-01	EF116250	EF410020
67 Hap2608																COI-Harm-26	Harm-08	EF116251	EF410027
68 Hap2701																COI-Harm-27	Harm-01	EF116252	EF410020
69 Hap2801																COI-Harm-28	Harm-01	EF116253	EF410020
70 Hap2901																COI-Harm-29	Harm-01	EF116254	EF410020
71 Hap3001																COI-Harm-30	Harm-01	EF116255	EF410020
72 Hap3101																COI-Harm-31	Harm-01	EF116256	EF410020
73 Hap3201																COI-Harm-32	Harm-01	EF116257	EF410020
74 Hap3301																COI-Harm-33	Harm-01	EF116258	EF410020
75 Hap3308																COI-Harm-33	Harm-08	EF116258	EF410027
76 Hap3401																COI-Harm-34	Harm-01	KX494879	EF410020
77 Hap3501																COI-Harm-35	Harm-01	KX494880	EF410020
78 Hap3620																COI-Harm-36	Harm-20	KX494881	EF410039
79 Hap3701																COI-Harm-37	Harm-01	KX494882	EF410020
80 Hap3801																COI-Harm-38	Harm-01	KX494883	EF410020
81 Hap3901																COI-Harm-39	Harm-01	KX494884	EF410020
82 Hap4001																COI-Harm-40	Harm-01	KX494885	EF410020
83 Hap4108																COI-Harm-41	Harm-08	KX494886	EF410027
84 Hap4201																COI-Harm-42	Harm-01	KX494887	EF410020
85 Hap4301																COI-Harm-43	Harm-01	KX494888	EF410020
86 Hap4401																COI-Harm-44	Harm-01	KX494889	EF410020
87 Hap4508																COI-Harm-45	Harm-08	KX494890	EF410027
88 Hap4601																COI-Harm-46	Harm-01	KX494891	EF410020
89 Hap4701																COI-Harm-47	Harm-01	KX494892	EF410020
90 Hap4832																COI-Harm-48	Harm-32	KX494893	KX494905
91 Hap4908																COI-Harm-49	Harm-08	KX494894	EF410027
92 Hap5030																COI-Harm-50	Harm-30	KX494895	KX494903
93 Hap5131																COI-Harm-51	Harm-31	KX494896	KX494904
94 Hap5201																COI-Harm-52	Harm-01	KX494897	EF410020
95 Hap5209																			



CHL	COL	ECU	CHL	ITA	COL	ECU	ECU	NLD	NLD	COL
4756.85	775414.17	9942.68	2340	4564.58	1409857.81	183379.44	345358.34	76294.48	107834.17	4365294.78
COL	ECU	COL	NLD	ECU	COL	COL	ECU	COL	COL	ECU
1071273.23	42321.51	947613.96	51241.33	201991.33			3360093.25	4731481	3997678.68	
ECU		ECU	CHL				ECU	ECU		
181623.4		37561.3	2340				1426567.71	3218270.94		
		COL								
			1286370.48							
		ECU								
			108659.54							

hs92_ProductID: 060310	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Asia	30831	0	1259	2562	1982	0	0	14034	113156	15657	51914	0
Africa	0	0	0	0	58021	0	1056	2687	2329	23510	0	0
EU	1151.17	13851	8979.22	25252.85	58462.07	33121.88	34167.08	0	76294.48	107834.17	45295.18	26835.52
NZ	0	0	0	0	0	2401	0	0	0	0	0	0

060310_+ 060210	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Asia	35734	3000	1259	10954	8808	93000	83000	54836	172158	95571	461870.99	161560
Africa	0	76342	0	0	65183	0	1056	87065	193324	60713	0	0
EU	1083487.17	831910.1	561551.22	660013.85	1235485.59	1295835.75	1043363.89	411452.97	186857.48	226364.92	257977.14	212221.85
NZ	0	0	0	0	0	2401	0	0	0	0	0	0

Where does Brazil import Foliage,branches, for bouquets, etc. - fresh from 2002-2013

Foliage,branches, for bouquets	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
hs92_product_id: 060491	ISR	ZAF	CHN	ISR	ISR	ISR	CHN	ISR	EGY	EGY	EGY	COL
Brazil Import from:	3000	8572	1620	9000	1000	8000	18059	5000	48857	105647	29385	1601
	DEU	ISR			ITA	USA	USA	AUS	USA	ISR		
	83000	1000			3033	2781	288000	14121	2910	91000		
	USA				USA				COL	COL		
	4200				3125				3714.52	2846		
									PER			
									2719			
hs92_product_id: 060491	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Asia	3000	1000	1620	9000	1000	8000	18059	5000		91000		0
Africa		8572							48857	105647	29385	
EU	83000				3033							
Australia								14121				

0602+06031+_060491	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Asia	201490.76	51988.6	166997.04	494861.95	187415.52	516830.47	620200.61	814611.23	1208586.93	1895839.84	3750531.91	3923833.03
Africa	16598.36	167939.87	0	0	65183	21341	4389.02	174713.92	455382	400127.33	98352.2	112341.23
EU	4312749.54	2824503.1	3054245.98	1913142.87	2960179.35	3484936.22	4577248.74	4650901.82	5739291.89	8657890.69	9113665.79	10223232.01
Australasia	0	8186	24464.55	20715.55	3172.11	2401	5833.29	14121	0	0	0	0



**Suppl. Table 5:** Brazil importation of agricultural and horticultural commodities (in financial volume of \$USD ,000) between 2002 to 2013 as represented by the Harmonized System (HS) code 08 for Edible Fruits and Nuts, Peel of Citrus/Melons (including hs92\_product\_ID: 0804, 081010, and 081090) from global destinations. International Organisation for Standardisation (ISO) three-letters country codes are used. Countries are grouped by continents (Africa = yellow; Asia = red; Europe = purple; North America = blue; South America = green; Australasia = orange). 'nes' = not elsewhere specified.

		Where does Brazil import Tropical Fruits from? (Year)													
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Tropical Fruits	hs92_product_id: 0804	DZA	TUN	TUN	EGY	EGY	TUN	TUN	TUN	TUN	DZA	SEN	BFA		
Brazil Import from:		4009.23	275251.76	276424.68	2212.3	105632	957021.9	833056.12	903884.69	1202423.62	13349.8	1851	44744		
		TUN	IRN	IND	TUN	SEN	ARE	ARE	IND	IRN	TUN	TUN	TUN		
		182876.66	2821.18	3544	353624.4	2554	3036	1045	3977	1293.51	1689404.86	1772142.85	1135394.39		
		IRN	LBN	IRN	ARE	TUN	IRN	IRN	IRN	ISR	ISR	ARE	CHN		
		16819.43	3153.63	4595.99	30489	354314.97	62754.45	46346.2	4197.68	78713.2	182506.92	1572.46	4484		
		LBN	TUR	TUR	IND	IND	LBN	ISR	ISR	LBN	LBN	IRN	IND		
		1580.55	463673.09	597406.15	6167	5837	13453.75	44382.37	177319.85	2682.83	6016.58	2913.15	53681		
		TUR	ESP	ESP	IRN	IRN	SAU	LBN	LBN	THA	PSE	ISR	IRN		
		545114.52	87819.94	124421.98	7754.38	21951.85	15208	2864.66	2661	116664.87	62674.34	187000	14516.18		
		ESP	CRI	CRI	LBN	OMN	SYR	THA	THA	TUR	THA	PSE	ISR		
		98895.64	242397	145184	1119.84	5540	1934.62	51545.72	50537.47	2052327.6	42834.06	69874.25	86000		
		ITA	MEX	CHL	THA	SYR	THA	TUR	TUR	ESP	TUR	THA	LBN		
		4021	19890	8779.03	6429.82	1142.7	2736.81	1811880.87	2280247.66	44582.68	2651038.48	113834.85	4920.78		
		CRI	USA	COL	TUR	THA	TUR	DEU	ESP	DOM	CRI	TUR	PHL		
		1212731	10437.66	1283	919663.15	12978.3	1781910.6	3000	67542.68	6345	18672	2037347.17	22838		
		ARG	CHL	ECU	ESP	TUR	ESP	USA	CRI	USA	USA	DEU	THA		
		1500	4016.77	6919	113683.99	1062338.67	88543.8	16123.37	3600	100708.94	377064.33	7273	72089.37		
		COL	COL		CRI	ESP	USA	CHL	DOM	ARG	CHL	PRT	TUR		
		7365	3437		28200	158549.7	7895.82	27430.03	31272	3000	14155	12328.77	1788287.91		
					MEX	MEX	ARG		USA	CHL	COL	USA	DEU		
					28900	29800	50550		46116.34	8159.28	14749	89221.02	9984		
					CHL	USA	CHL		CHL	COL		CHL	ESP		
					8228.14	7607.48	29814		25267	12845		45491	51734.31		
					COL	ARG			COL	PER		COL	IRL		
					2859	22450			1816	4950.5		7862	1639.52		
					CHL				PER			USA			
						30380			2362				45986.1		
					COL								BOL		
						2604							CHL		
					ECU								51220.83		
						9558							COL		
														15531	
<b>0804</b>		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Asia		563514.5	469647.9	605546.14	971623.19	1109788.52	1881034.23	1958064.82	2518940.66	2251682.01	2945070.38	2412541.88	2046817.24		
Africa		186885.89	275251.76	276424.68	355836.7	462500.97	957021.9	833056.12	903884.69	1202423.62	1702754.66	1773993.85	1180138.39		
EU		102916.64	87819.94	124421.98	113683.99	158549.7	88543.8	3000	67542.68	44582.68	0	7273	63357.83		
Australasia		0	0	0	0	0	0	0	0	0	0	0	0		

		Where does Brazil import Strawberries, Fresh from?													
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Strawberries, Fresh	hs92_product_id: 081010	USA		USA	ARG	No data	USA	ETH	USA	CHN	USA	USA	MEX		
Brazil Import from:		6333.03		1334.95	17193		15478.54	2540	49111.35	99962	820996.5	719555.8	1417		
		CHL						USA	CHL	USA	CHL		USA		
		3499.58						63946.83	1098.45	120384	93579.27		644737.36		
										CHL					
										116661.53					

		Where does Brazil import Fruits, fresh nes from? (Year)													
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
FruitFresh_nes	hs92_product_id: 081090	ESP	KEN	KEN	ESP	IND	ESP	ESP	ESP	ESP	ESP	DEU	CHN		
Brazil Import from:		47291.92	1576	2130	230731.98	8743	167071.6	169597.25	354621.1	590967.97	1243965.08	1731	2066.01		
		ITA	ESP	IND	ITA	ESP	FRA	FRA	FRA	FRA	FRA	ESP	DEU		
		2354740.52	83773.09	2688	3758403.29	182444.89	49661.2	60583.34	15283	111038.14	30829.84	1161665.81	1307		
		ARG	ITA	ESP	PRT	FRA	ITA	ITA	ITA	ITA	ITA	FRA	ESP		
		29592.2	1671676.76	137469.25	56287	90307.41	3712313.32	4615244.79	6155471.44	10445542.2	15555640.2	24868.94	1786926.23		
		CHL	CHL	FRA	USA	ITA	PRT	USA	USA	PRT	PRT	ITA	FRA		
		2848317.09	1913314.03	33505.56	19690	3419270.88	8503	126122.19	242005.51	25313	31245.84	10733039.09	21710.39		
		COL	COL	ITA	ARG	PRT	USA	NZL	NZL	USA	USA	PRT	ITA		
		49214.87	45553.91	1811543.58	32824	22750	63503.48	784517.87	644399.77	390738.13	835523.07	6592.49	16805758.46		
		URY		NLD	CHL	ARG	NZL	ARG	CHL	NZL	NZL	USA	PRT		
		16960		26126	2897521.95	16002.09	290454.31	444775	8878875.13	1411792.05	2635133.72	1212717.46	21911.05		
				ARG	COL	CHL	CHL	CHL	COL	ARG	ARG	NZL	USA		
				18726	56877.05	3196742.18	5113206.89	4638548.05	213967.72	20196	33600	2783568.41	873023.11		
				CHL	COL	COL	COL	COL		CHL	CHL	CHL	NZL		
				2549885.56		55273.18	86715.62	170857.96		10087532.4	12919521.94	16117899.89	2204318.37		
				COL		URY				COL	COL	COL	CHL		
				35362.04		35406				445562.35	845086.68	901272.81	18144166.58		
													COL		
														1068701.66	
<b>0804+081010+081090</b>		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Asia		0	0	2688	0	8743	0	0	0	0	0	0	0	2066.01	
Africa		0	1576	2130	0	0	0	0	0	0	0	0	0	0	
EU		2402032.44	1755449.85	2008644.39	4045422.27	3714773.18	3937549.12	4845425.38	6525375.54	11172861.3	16861680.96	11927897.33	18637613.13		
NZ		0	0	0	0	0	290454.31	784517.87	644399.77	1411792.05	2635133.72	2783568.41	2204318.37		

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Asia		563514.5	469647.9	608234.14	971623.19	1118531.52	1881034.23	1958064.82	2518940.66	2351644.01	2945070.38	2412541.88	2048883.25	
Africa		186885.89	276827.76	278554.68	355836.7	462500.97	957021.9	835596.12	903884.69	1202423.62	1702754.66	1773993.85	1180138.39	
EU		2504949.08	1843269.79	2133066.37	4159106.26	3873322.88	4026092.92	4848425.38	6592918.22	11217444	16861680.96	11935170.33	18700970.96	
Australasia		0	0	0	0	0	290454.31	784517.87	644399.77	1411792.05	2635133.72	2783568.41	2204318.37	