Pests of Phytosanitary Significance and their effect on trade

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**WTO-SPS Agreement**

Provides guidelines for application of SPS Measures
Includes measures relevant to

- Plant health protection
- Animal health protection
- Food safety
Use of Standards

- Wide range of private standards and regulations among them stringent sanitary and phytosanitary (SPS) measures govern agriculture production and trade

- Promotion of use standards would greatly contribute to sustainable agriculture, safe food and safe trade.
International bodies/organizations involved in setting phytosanitary standards, rules and regulations

- Organization for Economic Cooperation and Development (OECD)
- International Seed Testing Association (ISTA)
- International Union for the Protection of New Varieties of Plants (UPOV)
- International Plant Protection Convention (IPPC)
- Cartagena Protocol on Biosafety – CBD
- World Trade Organization (WTO)
Pests of Phytosanitary Significance

National Legal & Regulatory Framework

- The Agriculture Act (Cap 318)
- The Agricultural Produce (Export) Act (Cap 319).
- The Plant Protection Act (Cap 324).
- The Suppression of Noxious Weeds Act (Cap 325).
- The Seeds and Plant Varieties Act (Cap 326).
- The Fertilizer and Animal Foodstuffs Act (Cap 345).
- The Pest Control Products Act (Cap 346)
- The Food, Drugs and Chemical Substances Act (Cap 254).
Market and phytosanitary standards applied during *Inspection of Export commodity*

- Freedom from pests/pest damage
- Freedom from diseases/disease damage
- Freedom from soil
- Freedom from other inert material
- Maximum Residue Levels compliance

Some of the standards are quality but not phytosanitary issues. Phytosanitary requirements are only part of the expected compliance to standards.
## Tolerated levels for seed borne diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Tolerance level</th>
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<tbody>
<tr>
<td>Head smut (maize)</td>
<td>2 plants per hectare</td>
</tr>
<tr>
<td>Loose smut (maize)</td>
<td>2 plants per hectare</td>
</tr>
<tr>
<td>Bunt (wheat)</td>
<td>1 head per 100 sq. m</td>
</tr>
<tr>
<td>Bunt (sorghum)</td>
<td>1 plant per 1,000 plants</td>
</tr>
<tr>
<td>Halo bight (bean)</td>
<td>None at inspection</td>
</tr>
<tr>
<td>Anthracnose (bean)</td>
<td>None at inspection</td>
</tr>
<tr>
<td>Common bacterial blight (bean)</td>
<td>None at inspection</td>
</tr>
<tr>
<td>Bean common mosaic</td>
<td>None at inspection</td>
</tr>
<tr>
<td>Bacterial blight (cow pea)</td>
<td>None at inspection</td>
</tr>
<tr>
<td>Botrytis head rot (sun flower)</td>
<td>5 plants per 1,000 plants</td>
</tr>
<tr>
<td>Sclerotinia wilt &amp; head rot (sun flower)</td>
<td>5 plants per 1,000 plants</td>
</tr>
</tbody>
</table>
Quarantine pests

Cysts of golden nematode (*Globodera rostochiensis*):
Alternaria leaf spot (*Alternaria padwickii*):
Karnal bunt of wheat (*Tilletia indica*)
Melon thrips (Thrips palmi)
Potato wart (*Synchytrium endobioticum*)
Bacterial wilt

(*Curtobacterium flaccumfaciens* subsp. *flaccumfaciens*)
Regulated pests

Fruit fly (Bactrocera invadens):
Mango weevil (*Sternochetus mangiferae*)
Larger grain borer (*Prostephanus truncatus*):
Cassava brown streak virus
Leaf miner (Liriomyza spp):
Bollworms (*Helicoverpa* spp.):
White fly (*Bemisia tabaci*)
Thrips (*Frankliniella* spp):
Spider mites (*Tetranychus spp*):
Crown gall (*Agrobacterium tumefaciens*):
Bacterial crown gall on rose (*Agrobacterium tumefaciens*)
Water hyacinth (*Eichornia crassipes*)
Invasive water weed
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Banana Xanthomonas wilt
(Xanthomonas campestris pv musacearum)
Citrus canker  (*Xanthomonas axonopodis pv. citri*)
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Bacterial wilt (Ralstonia solanacearum)

Wilting of tomato
Brown discolouration of stem
Wilting of potato
Discolouration and ooze on tuber
Halo blight on bean

*(Pseudomonas savastanoi pv phaseolicola)*
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Common bacterial blight on bean
*(Xanthomonas axonopodis pv phaseoli)*
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Fusarium wilt or Panama disease on banana
(Fusarium oxysporum f. sp. cubense).
Angular leaf spot on bean (*Phaeoisariopsis griseola*)
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Bean anthracnose on pods and leaves

*(Colletotrichum lindemuthianum)*
Maize leaf blight
*Exserohilum turcicum*

Gray leaf spot
*Cercospora zeae-maydis*
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Loose smut
(*Ustilago maydis*)

Head Smut
(*Sphacelotheca reilianum*)
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Sclerotinia Head Rot of sunflower
Mycotoxin producing fungi
THANK YOU