

Estimation of weed seeds associated with consumable seeds

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As there is a risk of entering alien invasive type plant species into Sri Lanka, an investigation was initiated to find out the weed seeds associated with imported consumable seeds. Three composite samples of each of Coriander (*Coriandrum sativum*), Cumin (*Cuminum cyminum*), Fenugreek (*Trigonella foenum-graecum*) and Mustard (*Brassica juncea*) were taken from different wholesale centers at Petta, Colombo during March 2006. Weed seeds were separated manually observing under illuminated magnifier and were identified observing under stereoscopic microscope using seed identification manuals and reference collections. Except Fenugreek seeds, other three were contaminated with a large number of weeds/unit weight. The highest number of weed seeds (4218/kg) was found with Cumin seeds. Seeds of Mustard and Coriander were contaminated with 1688 and 612 weed seeds per unit weight respectively. Cumin and Coriander seeds were contaminated with a considerable amount of seeds of *Cuscuta* species which are total parasitic and *Convolvulus arvensis* and *Rumex crispus* which have been identified as noxious weeds. *Chenopodium album* and *Sorghum halepense* which have been classified as world's worst weeds were found with Mustard and Coriander seeds respectively. Most of the *Polygonum* species are invasive weeds and seeds of *Polygonum* species were found with Coriander, Cumin and Mustard seeds. Seeds of *Paperver* and *Bromus*

species were found with Cumin seeds and seeds of *Physalis* species were found with Mustard seeds. Some of the species of *Papaver*, *Bromus* and *Physalis* are noxious weeds. A large number of seeds of wild species of *Brassica* was found with Cumin seeds. Therefore, entering of such weeds to Sri Lanka through seeds should be minimised or stopped by introducing a proper purification procedure for consumable seeds.

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