

World Congress on

# Plant Genomics and Plant Science

October 15-16, 2018 London, UK

## Spread of noxious weed seeds through domesticated animals and fodder

Ikramullah Khan<sup>1,2,3</sup>, S Navie<sup>1</sup>, D George<sup>1</sup>, C O Donnell<sup>1</sup> and S W Adkins<sup>1</sup>

<sup>1</sup>The University of Queensland, Australia

<sup>2</sup>Abdul Wali Khan University Mardan, Pakistan

<sup>3</sup>Kunming Institute of Botany-Chinese Academy of Sciences, China

Globalization of trade brings many improvements to lifestyle, but there are some drawbacks. For example, the increased transport of animals internationally, along with food grain, seed and feed lots has increased the unintentional spread of weeds, nationally and internationally. Domesticated animals feed on weed-infested pastures, they too can carry weed seeds, either with in their gut or on their coat and these seeds can be transported over short or long distances. In this regard, a study was conducted in Queensland to see the spread of weed seeds through domesticated animals and fodder. Large numbers of germinable weed seeds were found in domesticated animal dung and therefore many weed species are thought to be spreading through dung in Queensland, Australia. Dry and fresh dung samples contained an average of 287 and 262 germinable weed seeds kg<sup>-1</sup>, respectively, which came from 55 species and represented 20 families. In addition, noxious weed seeds (e.g. *Parthenium weed*) were identified in both dry and fresh sample of dung from one location (*Clermont*) in May 2010, when the plants were mature and shedding seeds. The same is also true for certain kinds of baled fodder (i.e. lucerne (*Medicago sativa*) and Rhodes grass (*Chloris gayana*) in Queensland, in which the majority of the species found were introduced or alien to those regions. Therefore, weed seeds spread and invasion of alien weeds through these vectors needs to be prevented to save the agricultural and indigenous biodiversity.

ikramws@yahoo.co.uk

Notes: