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Agriculture Special Issue - 2018/2019: Proceeding papers presented at the International Millet Symposium (= The 3rd International Symposium on Broomcorn Millet), August 8-12, Fort Collins, CO, USA

TITLE: Millets: Crops for 21st Century in Changing Climate

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Special Issue Guest Editors

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Interests: Plant breeding, genetics, genomics, plant germplasm, and genetic diversity.

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Interests: Agronomy, crop production, cropping system, weed and soil nutrient management.

Special Issue Information

Dear Colleagues,

Millets are small-grained, annual cereal grasses and belong to panicoid group of Poaceae family. They are comprised of several species including pearl millet (*Pennisetum glaucum*), and a number of minor or small millets, which include finger millet (*Eleusine coracana*), proso (also known as broomcorn or common) millet (*Panicum miliaceum*), foxtail millet (*Setaria italica*), little millet (*Panicum sumatrense*), and kodo millet (*Paspalum scrobiculatum*). Although global production of these millets are significantly lower than major crops such as corn, wheat, rice, soybean, but they have unique place in 21st century, which faces challenges sustainable food production due to climate change, increasing human population, and decreasing farm land.

Millets are well-adapted to adverse conditions such drought, heat, poor soil with low fertility. This made millet as a perfect crop for sustainable low-input food production in changing climate. Millets are richer in nutrients than other major cereal crops. This millet is gluten-free with a starchy grain and has a low glycemic index, high fiber and essential minerals. Therefore, millets are not only climate-friendly but also good for human health. It is a common food ingredient in many Asian countries; however in the US, it is mostly used as bird seed, not human food.

In order to promote development of millets in the world, an International Millet Symposium is organized by the University of Nebraska-Lincoln and Colorado State University will be held in Fort Collins, Colorado, USA from August 8 to 12, 2018 (<https://go.unl.edu/millet2018>). This will strengthen exchanges and cooperation in scientific research among the countries with significant millet production, and increase socio-economic development. This Special Issue spotlights the role of millets in 21st century towards more sustainable agro-food production systems. Manuscripts (reviews, perspectives, or original articles) are invited and may include, but are not limited to, these topics:

- **Breeding:** Genetics, Germplasm, Genomics and Biotechnology
- **Agronomy and Production:** Farming practices, Production physiology, Crop rotation
- **Products and Market:** Quality for food, feed and beverages, Nutrition and health, Food chemistry & processing, new markets

Sincerely,

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Keywords

Panicoid species - Ancient grains - Bird seed - Gluten-free - Low glycemic index - Climate-friendly - Heat and drought tolerant - Cereals with high water use efficiency - Dryland farming