Proceedings of International Scientific Conference on Multidisciplinary Studies

Hosted online from Moscow, Russia Date: 11th December, 2022 ISSN: XXXX-XXXX

Website: econferenceseries.com

YIELD OF HYBRID CORN SAMPLES

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Abstract

The third most significant cereal crop after rice and wheat is maize (Zea mays L.). Enhancing maize production is thought to be among the most crucial tactics for food safety in underdeveloped nations. Today's maize grain is globally acknowledged as a key food and a feed crop that produces a substantial amount protein and energy for people, livestock.

Keywords: microfertilizers, irrigation, corn hybrids.

A versatile crop, corn supplies food for humans, feed for animals and poultry, and fodder for livestock. It is an abundant supply of raw materials for the industry, where it is widely utilized to make corn starch, corn, dextrose, corn syrup, corn flakes, etc. In traditional agriculture, farmers use large quantities of fertilizers and chemical plant protection techniques to achieve high crop yields. Chemical fertilizers and pesticides increase crop output without a doubt, but their uncontrolled use is creating issues like deteriorating soil structure, ground water contamination, increased nitrate in vegetables, and occasionally very high investment that makes the system unstable (FAO, 1978).

Modern farmers are well aware of the variations in field productivity and understand the potential benefits of adopting variable rate technologies rather than uniform application rates to manage crop production inputs. The intuitive attractiveness of variable rate farming is frequently promoted by images showing highly varying crop growth within fields. To offset the cost of using variable rates, only controlled and predictable sources of within-field variation can be used[1].

In conditions of sufficient moisture supply, corn has a yield rate that is higher than many other crops, making it one of the most productive cereals for all purposes. It also has a relatively high level of drought resilience, and with the right agrotechnical practices, it is capable of developing consistent productivity even in the absence of irrigation. One of the best factors, affecting the production rate of grains of corn,



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including its hybrid component and the use of mineral fertilizers, microfertilizers, irrigation, and stimulants for growth [2-5].

In addition to average soil and air temperatures over the course of the vegetative period, rainfall volume, and plant density all have an impact on the potential yield of corn hybrids with varied FAO numbers.

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