Title

Name

Institution

**Acid Rain**

 **Step 1 (Topic):** Acid Rain

**Citation News Article**

Acid showers and damage to plants. (1987). *Science News*, *132*(10), 158. Retrieved from <http://eznvcc.vccs.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=8823242&site=ehost-live>

**Citation Research Paper**

The effect of simulated acid rain on the growth of root systems of Scindapsus aureus Thomas V. El-Mallakh, Yonglin Gao, Rif S. El-Mallakh

**Step 3 Audience:** The audience of the article is the general public and most specifically farmers and agriculturists. Acid rain is one of the growing concern for the farmers because it is a general perception that it is harmful to any kind of crops.

**Purpose:** The purpose of the research article is to find out the effect of acid rain on the crops and in this article the plant selected is a vine plant. One of the main chemical that is present in acid rain is sulphuric acid so in this article different concentration of sulphuric acid was tested on the plant and then its effect on root hair was observed.

**References:** The language of the paper in English, and in total there are 15 references, and the referencing style is APA.

**B) Popular article characteristics**: The author of this news article is Denis T. Dubay who is also a botanist in North Carolina State University**.**

The intended audience of this news article is farmers because acid rain is causing major problems for farmers and their crops. So this is a major problem for the agriculturists (“Environment | Science News,” n.d.).

**Article main point 1**: Acid rain happens due to human activity; pollution is one of the reasons that it happens. Acid rain is a major concern for farmers because it is believed that this is harmful for the plants. So in this case it was found that acid rain is harmful for plants when they are in their early developmental stages. When corn plant was exposed to acid rain during kernel development than fewer kernels were developed. The effect was less severe in adult corn plants.

**Main point 2:** The effect of acid rain on the plants in their early developmental stages are much severe than on the adult plants that means that the effect of acid rain is not severe on plants than expected.

**Notes on Journal article (Audience):** The audience, in this case, is the agriculturists because here the concerns of agriculturists regarding acid rain are addressed.

**Total of 15 articles is cited in this research paper.**

**Main Point 1:** The effect of acid rain especially sulphuric acid was determined in this article, and it was found that acid rain is not dangerous to the plants when they are healthy.

**Main point 2:** When plants that were injured were affected with sulphuric acid then fewer root hairs were developed in them as compared to the plants that were healthy.

**Compare and Contrast the Two articles:**

Both of these articles are written to determine the effect of acid rain on plants. It is a general perception that acid rain is harmful to the plants and also it damages plant’s productivity. But in these articles, it was observed that when plants are in their early developmental stages and when they are injured, only then acid rain will affect them severely otherwise the impact is less serious.

In the research paper, the study is done on the vine plants (V et al., 2014). Effect of sulphuric acid was checked on the roots of vine plant, and it was observed that when the plant is damaged only then it will be affected. While in the news article effect of acid rain on corn kernels was reported. Here the effect of acid rain in the early developmental stage was checked while in research paper the effect of sulphuric acid on the injured vine plant at different concentration was studied.

**References**

Environment | Science News. (n.d.). Retrieved February 11, 2019, from https://www.sciencenews.org/archive/environment-97

V, T., El-Mallakh, Yonglin, Gao, S, R., & El-Mallakh. (2014). Effect of Simulated Acid Rain on Growth of Root Systems of Scindapsus Aureus. *International Journal of Plant Biology*. Retrieved from http://agris.fao.org/agris-search/search.do?recordID=US201700174926