

Distribution, Dynamics and Relationship of Some Mycorrhizal Fungalspores with Plants

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Abstract: *Rhizospheric soil samples were collected from different locations of Vadodara. Some selected plants were colonized with Vesicular Arbuscular Mycorrhiza (VAM) Fungi and were studied for root colonization. No correlation was observed in between percent root colonization and spore number. The diversity of Mycorrhizal Fungal spores were determined in all the selected plants. All together four VAM Fungal spores were isolated and identified up to genus level in which Glomus species were found predominant followed by Acaulospora, Scutellospora and Gigaspora. The roots of Mycorrhiza plants with intense hyphal connection suggests the interconnecting fungal network in the Rhizosphere and appears to be the most effective method for nutrient transfer in an ecosystem. The root colonization of VAM Fungi showed higher value for Crinum asiaticum. Importance of VAM Fungi with some selected plants has been discussed.*

Keywords: Vesicular Arbuscular Mycorrhizal Fungi (VAMF), root colonization, fungal spores.

I. INTRODUCTION

Dwyer Jim explains eco-fiction as nature-oriented fiction that is non-human oriented. (Dwyer Jim, 2010). Dwyer was not exclusive with genre when describing eco-fiction:

[Eco-fiction is] made up of many styles, primarily modernism, post-modernism, realism, and magical realism and can be found in many genres, primarily mainstream, westerns, mystery, romance, and speculative fiction. . . (Dwyer Jim's, 2010)

Eco-fiction intersects natural landscape, environmental issues, and wilderness—and human connection with nature. Dwyer said that eco-fiction “might be simply described as a critical perspective on the relationship between literature and the natural world, and the place of humanity within.” Source: Chico News & Review.

About the Author

Barbara Kingsolver is multifaceted American writer. Her writing frequently focuses on the themes such as biodiversity, socio-ecological issues, injustice, and the interface between man and ecosystem. Kingsolver is the recipient of numerous awards, like the UK's Orange Prize for Fiction 2010, for *The Lacuna* and the National Humanities Medal.

Socio-ecological Issues in Barbara Kingsolver's *Unsheltered*

Barbara Kingsolver's *Unsheltered* is the story of Willa, a middle aged woman who, in an attempt to get funding to fix up her shoddy old home. She realizes the history of her town - especially about Thatcher Greenwood. The story moves back and forth between Willa and Thatcher, depicting similarities of two places in their respective times. Kingsolver's hope in *Unsheltered* was to explore "paradigm shift".

Kingsolver's *Unsheltered* is the narrative of two families of two different centuries. The settings are different corners of Sixth and Plum. These families face the challenges of surviving as they confront the cultural shifts. Willa and Thatcher realize that the future is uncertain but shelter can be set up with the union of family members and in the strength of the human spirit.

In the year, 1870, Thatcher, the science teacher fights back with fulfilling the whims of his determined wife. Hence he develops a connection with his next-door neighbor, naturalist Mary Treat. Willa tries to enfold four generations that are living in a house but falling down. They members are struggling with day-today conflicts. In the old setting, Thatcher is facing the issues with other characters. Kingsolver uncovers similarities depicting the disturbances and depressions of members.

The main story moves around Willa and Iano. Both find themselves middle-aged and jobless. As Willa learns about Thatcher Greenwood, a science teacher whose enthusiasm for Charles Darwin's controversial new theory of evolution endangers his livelihood and reputation.

Willa Knox with her companion followed all the norms as sensible parents and experts in professions. They have only debts and a hereditary house that is also falling apart. Thatcher discovers himself under siege. His employer prohibits him to tell of the thrilling efforts published by Charles Darwin. Kingsolver celebrates life's adaptability and resilience, which includes humankind's capacity for learning, courage, change, and progress.

II. CONCLUSION

Barbara Kingsolver's *Unsheltered* is not typical of climate fiction since the environmental concerns are more related to eco-socio issues, exploitation and environmental justice. There is no direct examination of environmental issues; rather, the environmental disasters serve simply as backdrops to explore human experience in extreme situations. In the novel, environmentalism is a means of examining the characters, but is not otherwise essential to the narrative. The novel creates an ecological consciousness.

Several environmental issues are embedded in the narratives of Barbara Kingsolver. This includes the issues such as extreme weather conditions, global warming, food shortage, environmental diseases, and climate change in general. The novel also depicted how exploited and damaged environment becomes the main motivational factor for a character's decision. The roots of the characters are deep into the countryside places where they born and brought up. The novel acts as a transformative cultural agency that doubles as an ecological dimension of discourse.

REFERENCES

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