under non-irrigated and early irrigated treatments. A significant increase in floret sterility was also found on barley exposed to water stress at heading as well as at anthesis stage (Sandhu and Horton, 1977).

6. CONCLUSION

The results from the study demonstrated that a significant increase in grain yield of wheat can be obtained by application of rice straw mulch. The superiority of rice straw mulch is likely to be associated with a marked reduction of 03:00 pm. soil temperature as well as a better soil moisture condition. Results also indicated a highly significant interaction between irrigation and mulching treatments on wheat grain yield. When water was omitted throughout the crop growth period (non-irrigated treatment), wheat grain yields were markedly improved (by about 75-76%) by rice straw mulch as compared to bare soil. Similarly, grain yields of wheat were significantly increased (by about 42-56%) by rice straw mulch when water was omitted during the period before booting stage (late irrigated treatment). However, no significant differences among mulching treatments were detected when water was omitted from booting stage until maturity (early irrigated treatment) and in full irrigated treatments.

Overall, the results reveal that the application of rice straw mulch in wheat could be very attractive, particularly in the rainfed paddies of the Upper North where there is about 3 t/ha of rice straw