fla: flag leaf area(cm^2), ph: plant height (cm), , nog: number of grain per spike, bm: biomass yield(ton ha^{-1}), ti: number of tiller m^{-2}, hi: harvest index, tgw: thousand kernel weight (gm), dtb; days to booting, dth: days to heading, dta: days to flowering, fls: days to flag leaf senescence, mph: days to maturity, nor: number of root, rl: root length (cm), ctd: canopy temperature depression at flowering(°C), $SPAD_1$: SPAD immediately after flowering, $SPAD_2$:SPAD 10 days after flowering, $SPAD_3$: SPAD 20 days after flowering and rab: root angle in basket condition.

4. Conclusion

Correlation studies showed that flag leaf area, plant height, number of grain per spike, biomass yield, harvest index, thousand kernel weight, SPAD at the time of flowering and 10 days after flowering are significant and positive association with grain yield. Path analysis revealed that number of tiller per m^{-2}, harvest index, days to heading and flowering, number of root, SPAD at 20 days after flowering, root angle in basket condition. Biomass yield, harvest index, thousand kernel weight, plant height, SPAD 10 days after flowering, flag leaf area, SPAD immediately after flowering and number of grain per spike could be the major selection criteria in breeding program as they have direct effects on grain yield and positively correlated with grain yield.

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