

Mann-Whitney test showed that the egg yolk color score of Sentul chicken those was not a significant difference among the treatment R0 and R1 and significant difference to the treatment R2, R3, and R4. The treatment of R2, R3 and R4 produced a significantly higher yolk score ($P < 0.05$) compared to treatment R0 and R1. This means that the addition of spirulina from 1.5 - 2.5% level in the ration gives a positive response to the color of the yolk. This is caused by spirulina is a source of carotenoids with a high content of beta-carotene and xanthophyll which is a giver of color to the yolk to be more optimal. The color of the yolk arises due to the presence of carotenoids in eggs caused by ration containing carotene and xanthophyll pigments. According [13] the optimal level of yolk color (between 11.4 and 11.6 on the BASF yolk color fan) was achieved with 2.0-2.5% Spirulina in diet after only 7 days, the color levels of the egg yolks remained stable as long as the supplementation continued.

IV. CONCLUSION

It can be concluded showed the addition of spirulina of 1.5 - 2% in the ration increased hen day production and egg quality but with the addition of 2.5%, feed consumption, hen day production and feed conversion decreased. Spirulina can be used as feed supplement until 2% to give the best on production and eggs quality of Sentul chicken.

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