|  |  |
| --- | --- |
| Module designation | *Soil Fertility and Fertilizer* |
| Module level, if applicable | *Bachelor* |
| Code, if applicable | *PNT20192106* |
| Subtitle, if applicable |  |
| Courses, if applicable | *1. The definition and scope**2. The relationship of soil and plants**3. Macro nutrient**4. Micro nutrient**5. Soil fertility evaluation**6. Fertilizers**7. Fertilizing**8. Soil fertility management**9. Actual problems of soil fertility* |
| Semester(s) in which the module is taught | *Uneven* |
| Person responsible for the module | *Nasih Widya Yuwono, S.P., M.P.* |
| Lecturer | *Nasih Widya Yuwono, S.P., M.P.**Cahyo Wulandari, S.P., M.P., D.Agr.**Ir. Suci Handayani, M.P.**Dr. Ir. Sri Nuryani Hidayah Utami, M.P.,M.Sc.**Imas Masithoh Devangsari, S.P.,M.Sc.**Dr. Ir. Benito Heru Purwanto, M.P., M.Agr.**Patria Novita Kusumawardani, S.P., M.Sc.**Dr. Ir. Eko Hanudin, M.P.* |
| Language | *Bahasa/Indonesia Language.* |
| Relation to curriculum | *Compulsory* |
| Type of teaching, contact hours | *Lecture, practical, and presentation.* |
| Workload | *2/1 SKS or 3,02/1,51 ECTS* |
| Credit points |  |
| Requirements according to the examination regulations | *Presence must be 70% of all meetings.**Has to accomplished all the assignments.* |
| Recommended prerequisites | *-* |
| Module objectives/intended learning outcomes | *Students can explain the concepts and components of soil fertility**Students can describe the relationship between soil and plants**Students can explain the role of essential nutrients**Students can evaluate soil fertility**Students can carry out activities to improve soil fertility* |
| Content | *1. The definition and scope**2. The relationship of soil and plants**3. Macro nutrient**4. Micro nutrient**5. Soil fertility evaluation**6. Fertilizers**7. Fertilizing**8. Soil fertility management**9. Actual problems of soil fertility* |
| Study and examination requirements and forms of examination | *Assesment Presentasi/UTS/UAS* |
| Media employed | *Text, Presentation, Visual & Audio Web.* |
| Reading list | 1. *Black, C.A. 1967. Soil Plant Relationship. John Wiley and Sons. vii + 618 h.*
2. *Cooke, C.W. 1975. Fertilizing for Maximum Yield. The English Language Book Soc. And Crosby Lockwood Staples. London. Xx + 297 h.*
3. *Cosico, W.C. 1985. Organic Fertilizer: Their Nature, Properties & Use. College of Agriculture. University of Phillipines. Los Banos, 136 h*
4. *Foth, H.D. & B.G. Ellis. 1988. Soil Fertility. Reston Pub. Co. Virginia. Xii +368 h.*
5. *Jones, U.S. 1979. Fertilizer and Soil Fertility. Reston Pub. Co. Virginia. Xii 368 h.*
6. *Miller, R.W. & R.L. Donahue. 1990. Soils. An Introduction to Soils and Plant Growth. Prentice-Hall New Jersey. Xiv = 768 h.*
7. *Roesmarkam, A. & NY. Yuwono. 2002. Ilmu Kesuburan Tanah. Kanisius. Yogyakarta. ISBN 979-21-0468-2. 224 hal.*
8. *Russel, E.W. 1978. Soil Condition & Plant Growth. McGraw Hill. New York. 60 h.*
9. *Sastrohoetomo, A. 1968. Pupuk Buatan dan Penggunaannya. Djambatan. Jakarta. X + 60 h*
10. *Thompson, L.M. & F.R. Troeh. 1978. Soils & Soil Fertility. McGraw-Hill Pub. xi + 516 h.*
11. *Tisdale, S.L., W.L. Nelson & J.D. Beaton. 1986. Soil Fertility and Fertilizers. MacMillan Pub. New York. xiv + 754 h.*
 |