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| Module designation | *Technology of Fertilizer Materials and Fertilization* |
| Module level, if applicable | *Bachelor* |
| Code, if applicable | *PNT20192041* |
| Subtitle, if applicable |  |
| Courses, if applicable | 1. *Inorganic Fertilizer* 2. *Analysis of Inorganic Fertilizer* 3. *Organic Fertilizer* 4. *Alternative Fertilizer* 5. *Regulation and Standarization* 6. *Fertilization Recommendation* 7. *Fertilization Method* 8. *Fertilization Technology* 9. *Impact of Fertilization* |
| Semester(s) in which the module is taught | *Uneven* |
| Person responsible for the module | *Dr. Cahyo Wulandari, S.P., M.P.* |
| Lecturer | *Dr. Cahyo Wulandari, S.P., M.P.*  *Nasih Widya Yuwono, S.P., M.P.* |
| Language | *Bahasa/Indonesian language* |
| Relation to curriculum | *Elective* |
| Type of teaching, contact hours | *Lecture, practical, presentation* |
| Workload | *2/0 SKS or 3,02/0 ECTS* |
| Credit points |  |
| Requirements according to the examination regulations | *Presence must be 70% pf all meetings*  *Has to accomplished all the assignment* |
| Recommended prerequisites | *-* |
| Module objectives/intended learning outcomes | *Students can explain kinds of fertilizers, make and deliver them in a timely manner, method and dose*  *Students can explain the classification, materials and manufacturing process, properties, behavior and reactions in the soil, and make fertilization recommendations.*  *Students can explain the technology currently developing in fertilizer manufacture*  *Students are able to explain fertilizer standardization and regulations* |
| Content | 1. *Inorganic Fertilizer* 2. *Analysis of Inorganic Fertilizer* 3. *Organic Fertilizer* 4. *Alternative Fertilizer* 5. *Regulation and Standarization* 6. *Fertilization Recommendation* 7. *Fertilization Method* 8. *Fertilization Technology* 9. *Impact of Fertilization* |
| Study and examination  requirements and forms of examination | *Assesment Presentasi/UTS/UAS* |
| Media employed | *Text, Presentation, Visual & Audio Web.* |
| Reading list | 1. *Fowler, C. W. 1975. Urea and Urea Phosphate Fertilizers. Noyes Data Corporation. London* 2. *Hendrie, R.A. 1976. Granulated Fertilizers. Noyes Data Corporation. London* 3. *Highnett, T. P. 1985. Fertilizer Manual. The International Fertilizer Development Center.* 4. *Ignatieff, V. and HJ Page. 1985. Efficient Use of Fertilizers. Food and Agriculture Organization of the United Nation.* 5. *Roy, R.N., S. Soetharman and B.C. Biswas. 1979. Handbook of Fertilizer Usage. The Fertilizer Association of India. New Delhi.* 6. *Sanchez, P.A. 1976. Properties and Management of Soils in Tropics. John Wiley & Sobs.* 7. *Sittig, M. 1979. Fertilizer Industry, Process, Polition Control and Energy Conservation. Noyes Data Corporation.* 8. *Subba Rao, N.S. 1982. Biofertilization in Agriculture. Oxford & IBH Publishing Co. New Delhi.* 9. *Subba Rao, N.S. 1982. Advancer in Agricultural Microbiology. Oxford & IBH Publishing Co. New Delhi.* 10. *Tisdale, S.L., W.L., Nielsen & J.D. Beaton. 1986. Soil Fertility and Subba Rao, N.S. 1982. Biofertilization in Agriculture. Oxford & IBH Publishing Co. New Delhi.* 11. *Tisdale, S.L., W.L., Nelson J.D. Beaton. 1986. Soil Fertiliy and Fertilizers. Macmillan Pub. New York. Xiv + 754 h.* |