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| Titolo                  | Conceptual basis, formalisations and parameterization of the STICS crop model <a href="#">[[electronic resource] /]</a> / Nadine Brisson ... [et al.], [editors]  |
| Pubbl/distr/stampa      | Versailles, : Editions Quæ, 2008  |
| ISBN                    | 2-7592-0971-7<br>2-7592-0290-9  |
| Descrizione fisica      | 1 online resource (301 p.)  |
| Collana                 | Collection Update sciences & technologies, , 1773-7923  |
| Altri autori (Persone)  | BrissonNadine   |
| Soggetti                | Crops - Growth - Mathematical models<br>Crop yields - Mathematical models<br>Electronic books.  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | <p>""Table of contents""; ""Preface""; ""1. Introduction""; ""1.1 Purpose""; ""1.2 Overall description of the system with its components""; ""2. Development""; ""2.1 The simulated events""; ""2.2 Emergence and initiation of crop development and growth""; ""2.3 Above-ground development""; ""3. Shoot growth""; ""3.1 Leaf dynamics""; ""3.2 Radiation interception""; ""3.3 Shoot biomass growth""; ""3.4 Stress indices""; ""3.5 Partitioning of biomass in organs""; ""4. Yield formation""; ""4.1 For determinate growing plants""; ""4.2 For indeterminate growing plants""; ""4.3 Quality""</p> <p>""5. Root growth""""5.1 Root front growth""; ""5.2 Growth in root density""; ""6. Management and crop environment""; ""6.1 Effects on plants""; ""6.2 Soil water supply""; ""6.3 Net nitrogen supply""; ""6.4 Physical soil surface conditions""; ""6.5 Soil structure modification""; ""6.6 Microclimate""; ""7. Water Balance""; ""7.1 Soil evaporation""; ""7.2 Crop water requirements""; ""7.3 Plant transpiration and derived stresses""; ""8. Nitrogen transformations""; ""8.1 Mineralization of soil organic matter""; ""8.2 Mineralization of organic residues""; ""8.3 Nitrification""</p> <p>""8.4 Ammonia volatilization""""8.5 Denitrification""; ""8.6 Nitrogen uptake by plants and plant nitrogen status""; ""8.7 Nitrogen fixation by legumes""; ""9. Transfers of heat, water and nitrate""; ""9.1 Soil</p> |

temperature"; "9.2 Transfers of water and nitrate in free drained soil";  
"9.3 Case of artificially drained soil"; "9.4 Integrated calculations of  
soil status"; "10. Cropping systems"; "10.1 The notion of a Unit of  
SiMulation (USM)"; "10.2 Long term simulations"; "10.3  
Intercropping"; "11. Involvement of the user in the model operation";  
"11.1 Driving options"  
"11.2 Simulation options" "11.3 Formalisation options"; "11.4  
Parameterization"; "References"; "Figure list"; "Table list";  
"Definition of symbols"; "Index of parameters and variables"

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