Autorul tezei de abilitare: Alexandru Lucian CURTU
Titlul tezei de abilitare: Evaluarea diversității genetice la specii de arbori din România

Domeniul: SILVICULTURĂ

LISTA DE LUCRĂRI

LUCRĂRI RELEVANTE

(în reviste cotate ISI cu factor de impact, care nu conțin rezultate obținute în perioada studiilor doctorale)

1. **CURTU, A. L.**, I. CRACIUNESC, C. ENESCU, A. VIDALIS and N. SOFLETEA, 2015 Fine-scale spatial genetic structure in a multi-oak-species (*Quercus* spp.) forest. iForest - Biogeosciences and Forestry **8:** 324-332.
2. CRĂCIUNESC, I., B. VORNAM, L. LEINEMANN, R. FINKELDEY, N. ȘOFLETEA and **A. L. CURTU**, 2015 High genetic differentiation among European white oak species (*Quercus* spp.) at a dehydrin gene. Notulae Botanicae Horti Agrobotanici **43:** 582-588.
3. DZIALUK, A., I. CHYBICKI, R. GOUT, T. MĄCZKA, P. FLEISCHER, H. KONRAD, **A. L. CURTU**, N. SOFLETEA and A. VALADON, 2014 No reduction in genetic diversity of Swiss stone pine (*Pinus cembra* L.) in Tatra Mountains despite high fragmentation and small population size. Conservation Genetics**:** 1-13.
4. GAILING, O., and **A. L. CURTU**, 2014 Interspecific gene flow and maintenance of species integrity in oaks. Annals of Forest Research **57:** 5-18.
5. VIDALIS, A., **A. L. CURTU** and R. FINKELDEY, 2013 Novel SNP development and analysis at a NADP+-specific IDH enzyme gene in a four species mixed oak forest. Plant Biology **15:** 126-137.
6. ENESCU, C. M., **A. L. CURTU** and N. SOFLETEA, 2013 Is Quercus virgiliana a distinct morphological and genetic entity among European white oaks? Turkish Journal of Agriculture and Forestry **37:** 632-641.
7. PRUS-GŁOWACKI, W., L. URBANIAK, E. BUJAS and **A. L. CURTU**, 2012 Genetic variation of isolated and peripheral populations of *Pinus sylvestris* (L.) from glacial refugia. Flora - Morphology, Distribution, Functional Ecology of Plants **207:** 150-158.
8. **CURTU, A. L.**, I. C. MOLDOVAN, M. C. ENESCU, N. SOFLETEA and I. CRĂCIUNESC, 2011 Genetic differentiation between *Quercus frainetto* and *Q. pubescens* in Romania. Notulae Botanicae Horti Agrobotanici Cluj **39:** 275-282.
9. **CURTU, A. L.,** N. SOFLETEA, A. V. TOADER and M. C. ENESCU, 2011 Leaf morphological and genetic differentiation between *Quercus robur* L. and its closest relative, the drought tolerant *Quercus pedunculiflora* K. Koch. Annals of Forest Science **68:** 1163-1172.
10. MOLDOVAN, I. C., N. SOFLETEA, **A. L. CURTU**, I. V. ABRUDAN, D. POSTOLACHE *et al.*, 2010 Chloroplast DNA diversity of oak species in Eastern Romania. Notulae Botanicae Horti Agrobotanici Cluj **38:** 301-307.

TEZA DE DOCTORAT

Titlu: Patterns of genetic variation and hybridization in a mixed oak (*Quercus* spp.) forest.

Anul: 2006

Instituția: Georg-August Universität Göttingen, Germania.

Domeniul: Științe Silvice

Calificativ: *Summa Cum Laude* (Excelent)

Coordonator: Prof. dr. Reiner FINKELDEY

BREVETE

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CĂRȚI / CAPITOLE DE CĂRȚI

B.1. ȘOFLETEA, N., and **A. L. CURTU**, 2013 *Biodiversitatea specifică și genetică a pădurilor României, cu privire specială asupra plantelor superioare din ecosistemele forestiere cu grad ridicat de naturalitate*, pp. 81-97 în Pădurile virgine și cvasivirgine ale României, sub redacția acad. Victor GIURGIU.. Editura Academiei Române, București.

B.2. PÂRNUȚĂ, G., E. STUPARU, M. BUDEANU, V. SCĂRLĂTESCU, F.-M. MARICA *et al.*, **A. L. CURTU,** 2011 *Catalogul național al resurselor genetice forestiere*. Editura Silvică, București, 526p.

B.3. SOFLETEA, N., **A. L. CURTU** and M. TEODOSIU, 2009 Evaluarea diversitatii intra si interpopulationale cu ajutorul markerilor biochimici, pp. 177-200 in *Surse de seminte testate pentru principalele specii de arbori forestieri din Romania*, edited by G. MIHAI. Editura Silvica, Bucuresti (*engl.* Evaluation of within and among population diversity by means of biochemical makers).

B.4. SOFLETEA, N., and **A. L. CURTU**, 2007 *Dendrologie*. Editura Universitatii Transilvania, Brasov. 418pp (*engl.* Dendrology).

B.5. **CURTU, A. L.**, 2006 *Patterns of genetic variation and hybridization in a mixed oak (Quercus spp.) forest*. Cuvillier Verlag, Göttingen, 159pp.

B.6. SOFLETEA, N., and **A. L. CURTU**, 2001 *Dendrologie, vol. II – Corologia, ecologia şi însuşirile ecologice ale speciilor.* Editura "Pentru viață", Brașov.

B.7. SOFLETEA, N., and **A. L. CURTU**, 2000 *Dendrologie, vol. I - Morfologia si descrierea speciilor*. Editura "Pentru viață", Brașov.

ARTICOLE ÎN REVISTE

Articles in ISI Web of Science peer-reviewed journals

A.1. **CURTU, A. L.**, I. CRACIUNESC, C. ENESCU, A. VIDALIS and N. SOFLETEA, 2015 Fine-scale spatial genetic structure in a multi-oak-species (*Quercus* spp.) forest. iForest -

Biogeosciences and Forestry **8:** 324-332. (Scor relativ de influență = 0.707, Factor de impact = 1.150).

A.2. CRĂCIUNESC, I., B. VORNAM, L. LEINEMANN, R. FINKELDEY, N. ȘOFLETEA and **A. L. CURTU**, 2015 High genetic differentiation among European white oak species (*Quercus* spp.) at a dehydrin gene. Notulae Botanicae Horti Agrobotanici **43:** 582-588. (SRI = 0.381, FI = 0.547).

A.3. COTOVELEA, A., O. IONESCU, N. SOFLETEA, G. IONESCU, R. JURJ *et al.* and **A. L. CURTU**, 2015 Testing the influence of habituation on genetic structure of brown bear (*Ursus arctos*). Annals of Forest Research **58:** 81-90. (FI=0.444).

A.4. SOFLETEA, N., **A. L. CURTU**, M. L. DAIA and M. BUDEANU, 2015 The Dynamics and Variability of Radial Growth in Provenance Trials of Norway Spruce (*Picea abies* (L.) Karst.) Within and Beyond the Hot Margins of its Natural Range. Notulae Botanicae Horti Agrobotanici Cluj-Napoca **43:** 265-271. (SRI = 0.381, FI = 0.547).

A.5. DZIALUK, A., I. CHYBICKI, R. GOUT, T. MĄCZKA, P. FLEISCHER, H. KONRAD, **A. L. CURTU**, N. SOFLETEA and A. VALADON, 2014 No reduction in genetic diversity of Swiss stone pine (*Pinus cembra* L.) in Tatra Mountains despite high fragmentation and small population size. Conservation Genetics**:** 1-13. (SRI=1.082, FI=1.846)

A.6. GAILING, O., and **A. L. CURTU**, 2014 Interspecific gene flow and maintenance of species integrity in oaks. Annals of Forest Research **57:** 5-18. (FI=0.444)

A.7. RADU, R. G., **A. L. CURTU**, G. SPARCHEZ and N. ȘOFLETEA, 2014 Genetic diversity of Norway spruce [*Picea abies* (L.) Karst.] in Romanian Carpathians. Annals of Forest Research **57:** 19-29. (FI=0.444).

A.8. VIDALIS, A., **A. L. CURTU** and R. FINKELDEY, 2013 Novel SNP development and analysis at a NADP+-specific IDH enzyme gene in a four species mixed oak forest. Plant Biology **15:** 126-137 (SRI = 1.96, FI = 2.405).

A.9. ENESCU, C. M., **A. L. CURTU** and N. SOFLETEA, 2013 Is Quercus virgiliana a distinct morphological and genetic entity among European white oaks? Turkish Journal of Agriculture and Forestry **37:** 632-641 (SRI = 0.61, FI = 0.914).

A.10. PETIT, R. J., J. CARLSON, **A. L. CURTU**, M.-L. LOUSTAU, C. PLOMION *et al.*, 2013 Fagaceae trees as models to integrate ecology, evolution and genomics. New Phytologist **197:** 369-371 (SRI = 5.08, FI = 6.545).

A.11. PRUS-GŁOWACKI, W., L. URBANIAK, E. BUJAS and **A. L. CURTU**, 2012 Genetic variation of isolated and peripheral populations of *Pinus sylvestris* (L.) from glacial refugia. Flora - Morphology, Distribution, Functional Ecology of Plants **207:** 150-158 (SRI = 0.99, FI = 1.716).

A.12. **CURTU, A. L.**, I. C. MOLDOVAN, M. C. ENESCU, N. SOFLETEA and I. CRĂCIUNESC, 2011 Genetic differentiation between *Quercus frainetto* and *Q. pubescens* in Romania. Notulae Botanicae Horti Agrobotanici Cluj **39:** 275-282 (FI = 0.652).

A.13. **CURTU, A. L.,** N. SOFLETEA, A. V. TOADER and M. C. ENESCU, 2011 Leaf morphological and genetic differentiation between *Quercus robur* L. and its closest relative, the drought tolerant *Quercus pedunculiflora* K. Koch. Annals of Forest Science **68:** 1163-1172 (SRI = 1.26, FI = 1.788).

A.14. MOLDOVAN, I. C., N. SOFLETEA, **A. L. CURTU**, I. V. ABRUDAN, D. POSTOLACHE *et al.*, 2010 Chloroplast DNA diversity of oak species in Eastern Romania. Notulae Botanicae Horti Agrobotanici Cluj **38:** 301-307 (FI = 0.463).

A.15. **CURTU, A. L.**, O. GAILING and R. FINKELDEY, 2009 Patterns of contemporary hybridization inferred from paternity analysis in a four-oak-species forest. BMC Evolutionary Biology **9:** 284 (SRI = 1.95, FI = 4.294).

A.16. **CURTU, A. L.**, N. SOFLETEA, R. RADU, A. BACEA, I. V. ABRUDAN *et al.*, 2009 Allozyme variation of coniferous tree species from Maramures Mountains, Romania. Notulae Botanicae Horti Agrobotanici **37:** 245-251.

A.17. **CURTU, A. L.**, O. GAILING, L. LEINEMANN and R. FINKELDEY, 2007 Genetic variation and differentiation within a natural community of five oak species (*Quercus* spp.). Plant Biology **9:** 116-126 (SRI = 1.96, FI = 2.012).

A.18. **CURTU, A. L.**, O. GAILING and R. FINKELDEY, 2007 Evidence for hybridization and introgression within a species-rich oak (*Quercus* spp.) community. BMC Evolutionary Biology **7:** 218 (SRI = 1.95, FI = 4.091).

A.19. GAILING, O., H. WACHTER, H.-P. SCHMITT, **A. L. CURTU** and R. FINKELDEY, 2007 Characterization of different provenances of Slavonian oaks (*Quercus robur* L.) in Münsterland (Germany) with chloroplast DNA markers: PCR-RFLPs and chloroplast microsatellites. Allgemeine Forst und Jagdzeitung **178:** 85-90 (SRI = 0.25, FI = 0.471).

A.20. **CURTU, A. L.**, R. FINKELDEY and O. GAILING, 2004 Comparative sequencing of a microsatellite locus reveals size homoplasy within and between European oak species (*Quercus* spp.). Plant Molecular Biology Reporter **22:** 339-346 (SRI = 0.77, FI = 0.785).

Other peer-reviewed journals (e.g. indexate în Scopus, CABI Database, Thomson Reuters Master Journal List)

A.21. CĂRĂBUŞ, M., L. LEINEMANN, **A. L. CURTU** and N. ŞOFLETEA, 2015 Preliminary results on the genetic diversity of *Carpinus betulus* in Carpathian populations. Bulletin of the Transilvania University of Brasov, Series II-Forestry, Wood Industry, Agricultural Food Engineering **8:** 1-6.

A.22. ENESCU, C. M., N. SOFLETEA and **A. L. CURTU**, 2013 Testing Bayesian algorithms to detect genetic structure in two closely related oak taxa. Annals of the "Alexandru Ioan Cuza" University Sect.II a. Genetics and Molecular Biology **14:** 1-6.

A.23. ENESCU, C. M., N. ŞOFLETEA and **A. L. CURTU**, 2012 Fruit morphological variability of pubescent oak (Quercus pubescens Willd.) in two geographical regions of Romania. Revista Pădurilor **127:** 19-23.

A.24. RADU, R., N. ŞOFLETEA and **A. L. CURTU**, 2012 Allozyme genetic variation and spatial genetic structure in two populations of Norway spruce [Picea abies (L.) Karst] from different levels of altitude from Postăvarul Mountain. Revista Pădurilor **127:** 3-8.

A.25. ENESCU, C., N. SOFLETEA and **A. L. CURTU**, 2012 Cluster analysis in pubescent oak taxa from series Lanuginosae: a case study. Bulletin of the Transilvania University of Braşov, Series II: Forestry • Wood Industry • Agricultural Food Engineering **5:** 79-84.

A.26. SOFLETEA, N., C. M. ENESCU and **A. L. CURTU**, 2011 Small-scale morphological descriptor analysis in four Romanian oak stands reported to Series *Lanuginosae* Simk. Bulletin of the Transilvania University of Braşov, Series II: Forestry • Wood Industry • Agricultural Food Engineering **4:** 77-84.

A.27. CRĂCIUNESC, I., E. CIOCÂRLAN, N. ȘOFLETEA and **A. L. CURTU**, 2011 Genetic diversity of pedunculate oak (*Quercus robur* L.) in Prejmer Natural Reserve. Bulletin of the Transilvania University of Braşov, Series II: Forestry • Wood Industry • Agricultural Food Engineering **4 (1):** 15-20.

A.28. SOFLETEA, N., I. C. MOLDOVAN, C. M. ENESCU, I. CRĂCIUNESC and **A. L. CURTU**, 2011 Consideraţii privind identificarea hibrizilor între speciile autohtone de cvercinee. Revista Padurilor **126:** 6-11.

A.29. GAILING, O., B. VORNAM, L. LEINEMANN, **A. L. CURTU** and R. FINKELDEY, 2010 Genetic approaches to assess adaptive genetic variation in oaks. Forstarchiv **81:** 150-155.

A.30. ENESCU, C. M., E. N. CHESNOIU, N. SOFLETEA and **A. L. CURTU**, 2010 Leaf morphology in *Quercus robur* L. genetic resources across Romania. Bulletin of the Transilvania University of Braşov, Series II: Forestry • Wood Industry • Agricultural Food Engineering **3:** 47-54.

A.31. CHESNOIU, E. N., N. SOFLETEA, **A. L. CURTU**, A. TOADER, R. RADU *et al.*, 2009 Bud burst and flowering phenology in a mixed oak forest from Eastern Romania. Annals of Forest Research **52:** 199-206.

A.32. TOADER, A., I. C. MOLDOVAN, N. SOFLETEA, I. V. ABRUDAN and **A. L. CURTU**, 2009 DNA isolation and amplification in oak species (*Quercus* spp.). Bulletin of the Transilvania University of Brasov **2 Series II:** 45-50.

A.33. **CURTU, A. L.**, N. SOFLETEA, A. TOADER, I. C. MOLDOVAN, M. ENESCU *et al.*, 2009 Stejarul brumariu: specie sau unitate intraspecifica a stejarului pedunculat. Revista Padurilor **5:** 24-30 (*engl.* Greyish oak: species or intraspecific unit of pedunculate oak).

A.34. SOFLETEA, N., **A. L. CURTU**, A. V. TOADER, I. PRICOPIE and R. RADU, 2009 Utilizarea analizelor de izoenzime in genetica forestiera: un studiu de caz pentru molidul din Muntii Poiana Rusca. Revista Padurilor **5:** 17-23 (*engl.* Isozyme analysis in forest genetics: a case study for Norway spruce in Poiana Rusca Mountains).

A.35. SOFLETEA, N., **A. L. CURTU** and G. PARNUTA, 2008 Evaluarea resurselor genetice de cires salbatic (*Prunus avium* L.) si nuc negru (*Juglans nigra* L.) din Romania cu ajutorul markerilor biochimici primari. Revista Padurilor **5:** 3-7 (*engl.* Evaluation of genetic resources in wild cherry and common walnut by means of isozyme markers).

A.36. MIHAI, G., N. SOFLETEA, **A. L. CURTU**, G. PARNUTA, L. IONITA *et al.*, 2008 Evaluari privind variatia genetica a principalelor specii de arbori forestieri din Romania, in vederea stabilirii surselor de seminte testate. Revista Padurilor **4:** 3-11 (*engl.* Evaluation of genetic variation in forest tree species of Romania: implications for tested seed sources).

A.37. SOFLETEA, N., G. SPARCHEZ and **A. L. CURTU**, 2003 Population stomata index (ISP) in oak tree populations. Bulletin of Transilvania University of Brasov **10:** 227-232.

A.38. **CURTU, A. L.**, 2003 Cercetari privind variabilitatea genetica a molidului [*Picea abies* (L.) Karst.] realizate cu ajutorul markerilor ADN. Revista Padurilor **3:** 10-15.

A.39. SOFLETEA, N., D. TARZIU, G. SPARCHEZ and **A. L. CURTU**, 2002 Cercetari de genetica ecologica privind climatipurile si edafotipurile la cvercinee si fag, în vederea fundamentarii masurilor silvotehnice si de conservare a acestor arborete. Analele ICAS **Seria I, 45:** 57-66 (*engl.* Ecological genetics study on climatypes and edaphotypes of oak and beech: implications for silvicultural interventions and conservation).

ARTICOLE PUBLICATE IN VOLUME ALE CONFERINȚELOR INTERNAȚIONALE

In extenso (CABI Forest Science Database)

C.1. CRĂCIUNESC, I., N. SOFLETEA and **A. L. CURTU**, 2013 Identification of hybrids between oak species. Forest and Sustainable Development, Brasov, 2012**:** 51-56.

C.2. RADU, R., N. ȘOFLETEA and **A. L. CURTU**, 2011 Allozyme genetic variation in a high elevated population of Norway spruce [*Picea abies* (L.) Kars] from Nemira Mountains., pp. 93-98 in *Biennial International Symposium, Forest and Sustainable Development, Braşov, Romania, 15-16th October 2010*. Transilvania University of Brasov, Brașov, Romania.

C.3. TOADER, A., N. SOFLETEA and **A. L. CURTU**, 2009 Variatia genetica izoenzimatica a stejarului pedunculat (*Quercus robur* L.) si stejarului brumariu (*Quercus pedunculiflora* K. Koch) din Romania, pp. 1-8 in *Forest and Sustainable Development*, edited by T. U. O. BRASOV. Editura Universitatii Transilvania din Brasov, Brasov (*engl.* Isozyme genetic variation in pedunculate and greyish oak).

C.4. SOFLETEA, N., D. TARZIU, G. SPARCHEZ and **A. L. CURTU**, 2007 Evaluari corologice si fenomice în populatii de artar (*Acer platanoides* L.) din România., pp. 51-56 in *Proceedings of Biennial International Symposium Forest and sustainable management, 27-28 October 2006*. Editura Universitatii Transilvania, Brasov (*engl.* Chorological and phenotypic evaluations in maple populations in Romania).

C.5. TARZIU, D., G. SPARCHEZ, N. SOFLETEA and **A. L. CURTU**, 2005 Caracterizarea niselor ecologice optime, suboptime si limitative pentru cultura ciresului paduret (*Prunus avium* L.) si sorbului (*Sorbus torminalis* (L) Cr.) în România., pp. 41-46 in *Proceedings of the Symposium Forest and Sustainable Development*, edited by E. U. TRANSILVANIA, Brasov (*engl.* Characterization of ecological niches in wild cherry and wild service tree).

C.6. SOFLETEA, N., D. TARZIU, G. SPARCHEZ and **A. L. CURTU**, 2005 Indicatori fenotipici ai ciresului salbatic (*Prunus avium* L.) si sorbului (*Sorbus torminalis* (L) Cr.) în functie de conditiile stationale si de arboret, pp. 47-52 in *Proceedings of the Symposium Forest and Sustainable Development*. Editura Universitatii Transilvania, Brasov (*engl.* Phenotypic indicators of wild cherry and wild service tree as a function of site and stand conditions).

ALTE LUCRĂRI / REALIZARI RELEVANTE

Book of Abstracts

C.7. ȘOFLETEA, N., **A. L. CURTU** and M. BUDEANU, 2015 Assesment of adaptive traits of Norvay spruce [Picea abies (L.) Karst.] within and beyond of its natural range, Poster - *XIV World Forestry Congress 2015, 1-11 September*, Durban, South Africa.

C.8. **CURTU, A. L.**, N. ȘOFLETEA and R. FINKELDEY, 2014 Characterisation of marginal pedunculate oak populations adapted to xeric conditions: implication for conservation and sustainable management, Poster - *IUFRO World Congress 5-11 October 2014*, Salt Lake City.

C.9. CRĂCIUNESC, I., C. M. ENESCU, N. SOFLETEA and **A. L. CURTU**, 2012 Floral phenology in a mixed species, natural oak forest of Romania, Poster - *Genetics of Fagaceae and Nothofagaceae, IUFRO Conference, 9-12 October, 2012*, Bordeaux, France.

C.10. **CURTU, A. L.**, N. SOFLETEA and R. FINKELDEY, 2012 The drought-adapted *Quercus pedunculiflora* is genetically differentiated from the closely related *Q. robur*, Poster - *Genetics of Fagaceae and Nothofagaceae, IUFRO Conference, 9-12 October, 2012*, Bordeaux, France.

C.11. **CURTU, A. L.**, and N. SOFLETEA, 2010 Investigations on genetic differentiation between two ecologically divergent oak species: the case of *Quercus robur* and *Q. pedunculiflora* in Romania, p. 13 in *Evolutionary and ecological genomics of adaptation*, CUSO, Fribourg, Switzerland, 2-3 September 2010.

C.12. **CURTU, A. L.**, N. SOFLETEA, A. V. TOADER, C. M. ENESCU and I. C. MOLDOVAN, 2010 Genetic diversity of *Quercus robur* L. in Romania: implications for conservation. The International Forestry Review **12:** 102.

C.13. **CURTU, A. L.**, A. TOADER and N. SOFLETEA, 2009 Allozyme variation in genetic resources of *Quercus pedunculiflora* K. Koch from Romania, pp. 175 in *XIII World Forestry Congress*, Buenos Aires.

C.14. TOADER, A., I. C. MOLDOVAN, N. SOFLETEA, **A. L. CURTU** and F. POPESCU, 2009 New chloroplast DNA haplotypes of pedunculate oak (*Quercus robur* L.) identified in Romania, pp. in *Forest Ecology, Mapping and Sustainable management: progress and perspectives*, Bucharest.

C.15. **CURTU, A. L.**, O. GAILING and R. FINKELDEY, 2007 Maintenance of species integrity in sympatric oak species and the genetics of species differences, pp. 86 in *Botanikertagung 3-7 September*, Hamburg.

C.16. SOFLETEA, N., G. PARNUTA and **A. L. CURTU**, 2007 Genetic variation of a noble hardwood species (wild cherry - *Prunus avium* L.) in Romania, pp. in *Forstgenetik - eine ökologische und ökonomische Zukunft gestalten. 27. Tagung der Arbeitsgemeinschaft Forstgenetik und Forstpflanzenzüchtung. 10-13 Oktober 2007*, Wien.

C.17. **CURTU, A. L.**, O. GAILING and R. FINKELDEY, 2006 Microsatellite genetic structure of a white oak species complex (*Quercus* spp.) in Romania, pp. 60 in *Abstract book of Plant Population Biology, 19th Annual Conference of the Section Plant Population Biology of the Ecological Society of Germany, Switzerland and Austria*, Halle/Saale.

C.18. **CURTU, A. L.**, O. GAILING and R. FINKELDEY, 2004 Chloroplast DNA (cpDNA) variation in a natural mixed forest of oak species, pp. 338 (Poster) in *Botanikertagung*, edited by D. B. GESELLSCHAFT, Braunschweig.

Data: 28.03.2016

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